BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

FILED
04/15/22
04:59 PM
A1911003

Application of Pacific Gas and Electric Company for Approval of Energy Savings Assistance and California Alternate Rates for Energy Programs and Budgets for 2021-2026 Program Years (U39M)	Application 19-11-003
And Related Matters.	Application.19-11-004 Application 19-11-005 Application 19-11-006 Application 19-11-007

THE PUBLIC ADVOCATES OFFICE'S PETITION FOR MODIFICATION OF DECISION 21-06-015

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April 15, 2022

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I. INTRODUCTION

Pursuant to Rule 16.4 of the California Public Utilities Commission's (CPUC or Commission) Rules of Practice and Procedure, the Public Advocates Office at the Commission (Cal Advocates) submits this Petition for Modification (Petition) of Decision (D.) 21-06-015 on California Alternate Rates for Energy (CARE), Energy Savings Assistance (ESA), and Family Electric Rate Assistance (FERA) program applications of four large Investor Owned Utilities: Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), Southern California Gas Company (SoCalGas), and San Diego Gas & Electric Company (SDG&E), (collectively IOUs). D.21-06-015 approved budgets for the IOUs' CARE, ESA, and FERA programs for the 2021-2026 program years (PYs).

Consistent with Rule 16.4(b), Cal Advocates proposes changes to the Finding of Facts and Ordering Paragraphs in D.21-06-015. The proposed changes would account for the new facts and changed circumstances, occurred after the issuance of D.21-06-015. These proposed changes relate to the current income verification processes conducted by the IOUs and their impacts on certain CARE and FERA program customers. Cal Advocates' proposed changes to D.21-06-015 are set forth in Appendix A and the Declaration of Adam Buchholz is attached as Appendix B. This Petition is timely filed under Rule 16.4(d).

Cal Advocates requests that the Commission modify D.21-06-015 to address the harm to income-qualified CARE and FERA customers caused by low-income program policies and the IOUs' income verification processes. The requested changes include:

- The Findings of Facts should be modified to acknowledge that: (1) the IOUs' income verification processes impose unreasonable barriers for eligible customers to participate in CARE and FERA; and (2) eligible households suffer severe negative financial impacts when erroneously removed from CARE and FERA.; and (3) the current post-enrollment verification algorithms include high usage as a variable, which undercuts improvements to the high usage verification process.

- Ordering Paragraph 8 should be modified to authorize the IOUs to update their CARE income verification algorithms to account for bias in the underlying training data; any updates must be approved via Tier 2 Advice Letters.
- Ordering Paragraph 13 should be modified to require the IOUs to conduct an outbound call pilot for households selected for recertification.
- Add an Ordering Paragraph to require the IOUs to immediately suspend CARE and FERA income verification for at least 6 months, which can be extended, until a more efficient and less burdensome income verification process is developed;
- Add an Ordering Paragraph to require the IOUs to collaborate with interested parties to develop a more efficient and less burdensome income verification process to replace the current process, and have them provide quarterly updates to the Commission;
- Add an Ordering Paragraph to require the IOUs to work with interested parties to identify how to improve existing verification methods to meaningfully reduce the likelihood of inappropriate removal from CARE/FERA; and
- Add an Ordering Paragraph to require the IOUs to immediately and automatically re-enroll any customers removed from CARE/FERA due to their non-response to income verification requests, and return any lost discounts and back-charges1 to these customers in the form of a bill credit.
- Add an Ordering Paragraph to prohibit the IOUs from back-charging customers who are removed from CARE/FERA for the CARE/FERA discount.
- Add an Ordering Paragraph to require the IOUs to credit customers who do not respond to verification requests, but who re-enroll within three billing cycles and demonstrate eligibility, with the missed CARE/FERA discount.

Cal Advocates makes its recommendations for several reasons. Specifically, new evidence shows that many customers are removed from CARE/FERA every year by the IOUs, and most of them are removed due to non-response to income verification

[1] Back-charging or back-billing references the practice of retroactively charging customers at the non-CARE rate when they are removed from CARE.

requests. Second, as a result of being removed from CARE, these households faced significant financial impacts including lost program benefits and high arrearage and disconnection rates. These findings are supported by evidence indicating that a high percentage of non-responding customers are actually qualified for CARE/FERA, but they were erroneously removed from the program as a result of the flawed income verification processes. Last, the post-enrollment verification algorithms for assessing CARE eligibility are inherently flawed due to a lack of key customer information and sampling data bias. To remedy these issues, Cal Advocates proposes modifications to D.21-06-015 in Section V of the Petition. Failure to implement these proposed modifications will continue the significant and irreparable financial harm to CARE and FERA customers.

II. BACKGROUND

A. Overview of the CARE and FERA Programs, and D.21-06-015

The CARE program is a low-income energy rate assistance program instituted in 1989, which provides a discount on energy rates to low-income households with incomes at or below 200 percent of the Federal Poverty Limit.[2] Currently, the IOUs' CARE participants receive a 20 percent discount on natural gas charges and a 30 to 35 percent discount on their electric rate.[3] To enroll in CARE, the IOUs' customers must self-certify that their income meets the program eligibility requirement or that they are enrolled in a categorical qualifying income-based program (categorical eligibility).[4] The CARE program is funded by non-participating ratepayers as part of a statutory public purpose program (PPP) surcharge that appears on their monthly utility bills.[5]

Authorized by California Public Utilities Code Section 739.12,[6] the FERA program is a separate low-income energy rate assistance program. FERA was established in 2004 to provide a discount on energy rates to low- and middle-income households with

[2] Pub. Util. Code, § 2790.

[3] Pub. Util. Code, § 739.1, subd. (c).

[4] D.21-06-015, p. 21.

[5] Pub. Util. Code, § 382.

[6] Pub. Util. Code, § 739.12, subds. (a)-(c).

incomes that are between 200 and 250 percent of the Federal Poverty Limit. FERA was designed to assist larger households that are ineligible for CARE because their income level is slightly above the CARE eligibility limit.[7] FERA is funded by both participating and non-participating ratepayers through either customer distribution rates or statutory PPP surcharge that appears on their monthly utility bills.

In accordance with D.19-06-022, on November 4, 2019, the IOUs submitted applications for the approval of the CARE, ESA, and FERA programs and budgets for PYs 2021-2026. The IOU applications were consolidated into one proceeding by the assigned Administrative Law Judge. The applications comprised proposals for new program budgets, delivery models, targets and goals, offerings, marketing, outreach, and enrollment practices, and program and policy changes. Based on the proceeding record, on June 7, 2021, the Commission issued D.21-06-015 which authorized the CARE, ESA, and FERA programs and budgets for the IOUs. Specifically, D.21-06-015 directs the IOUs to maintain the enrollment goal of 90 percent for the 2021-2026 PYs for CARE, and a 50 percent penetration by 2023 with the aim of reaching 70 percent penetration by 2026 for FERA.[8] D.21-06-015 further eases recertification and verification rules for certain groups of CARE and FERA customers in order to decrease barriers to participation.[9] D.21-06-015 also ordered a "Categorical Eligibility Study" to explore whether any categorical programs are candidates for potential data-sharing between the IOUs and state or federal agencies.[10]

B. The Income Verification Methods Conducted by the IOUs

Currently, the IOUs have three methods by which participating CARE customers verify their income.[11] The first method is recertification, under which customers verify

[7] FERA was established by D.04-02-057 as the Large Household Program.

[8] D.21-06-015, Ordering Paragraphs 4, 24.

[9] D.21-06-015, Ordering Paragraphs 5-11, 27-29.

[10] D.21-06-015, Ordering Paragraph 170.

[11] FERA participants face similar eligibility verification requirements, but only includes recertification and limited PEV. For example, SDG&E's Low Income Annual Report (Annual CARE/ESA Report) for

their CARE eligibility every two years; customers on a fixed income recertify every four years.[12] For households that are also identified by the IOUs' CARE probability models as having a "high likelihood" of being CARE-eligible, the recertification requirement has been extended from two years to four.[13] Recertification only requires a phone call from the customer. With the second income verification method, the IOUs use an income-verification process known as post enrollment verification (PEV). PEV attempts to balance the policy goal of maximum participation with the need to verify participant eligibility.[14] Under the PEV process, customers who appear unlikely to qualify for CARE, as determined by the IOUs' algorithms or probability models, are required to submit an IRS tax return or other documentation to verify their income. The customer may also demonstrate categorical eligibility by demonstrating their participation in programs like CalFresh. The third income verification method is high usage post-enrollment verification (HU PEV). Under HU PEV, customers who use more than 400 percent of the monthly baseline[15] for three months in a year are required to submit proof of income (at or below 200% of Federal Poverty Limit) and enroll in the ESA program.[16] Notably, HU PEV is only used for electric usage, not gas.

On April 17, 2020, the Commission issued Resolution M-4842,[17] which extended several emergency customer protections including:1) Freezing all standard and high usage reviews for the CARE program eligibility until June 30, 2021; 2) suspending

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PY 2019 indicates only 423 PEV requests for FERA. PG&E's Annual CARE/ESA Report for PY 2019 indicates no PEV in that year. The FERA PEV is not driven by an algorithm. The HU PEV process was only recently implemented in D.21-06-015. (D.21-06-015, Ordering Paragraph 28.)

[12] D.21-06-015, p. 21.

[13] D.21-06-015, p. 21.

[14] D.21-06-015, pp. 6-7; Pub. Util. Code, § 739.2, subd. (a)(1)-(3).

[15] "Monthly Baseline" is defined is a specific amount of typical energy usage for a household.

[16] D.21-06-015, p. 22; Pub. Util. Code, § 739.1, subd. (i)(1)-(2). Baseline a customers' energy allowance for basic needs and is billed at the lowest rate.

[17] Resolutions M-4842, *Emergency Authorization and Order Directing Utilities to Implement Emergency Customer Protections to Support California Customers During the Covid-19 Pandemic,* April 16, 2020, p. 1.

removal of customers from the CARE and FERA programs to avoid unintentional loss of the discounted rate during the period; and 3) discontinuing the IOUs' recertification and verification processes that require customers to provide their current income information.[18]

D.21-06-015 requires the IOUs to automatically recertify customers who are identified through their probability models as having a high-probability of being CARE-eligible. In addition, the Decision requires that the IOUs adopt a four-year recertification cycle for customers with a high probability of being CARE-eligible.[19] The Decision further directs that each IOU implement, by December 31, 2022, an auto-recertification process for FERA customers that mirrors the CARE auto-recertification process, and implement a high usage post enrollment verification policy for FERA, aligning the FERA income verification requirement for HU PEV with CARE.[20] The Decision also requires each IOU to carry out an outreach pilot program for customers who attempted but failed to complete their PEV paperwork,[21] and exempts certain fixed income households from recertification for six years.[22]

However, the Decision does not consider that the IOUs' income verification process presents unreasonable barriers to CARE and FERA customers and causes significant financial impacts on customers who are removed from the programs. While the Decision allows the IOUs to improve their PEV algorithms, it removes Commission oversight over those improvements by not continuing to require the IOUs to submit their algorithm changes for review, nor does it require the IOUs to address major flaws relating to sampling bias identified in this petition. Notably, as discussed in detail below,

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[18] Resolution M-4849, *Authorization and Order Directing Utilities to Extend Emergency Customer Protections to Support California Customers Through June 30, 2021, and to File Transition Plans for the Expiration of the Emergency Customer Protections,* Feb. 11, 2021, p. 6.

[19] D.21-06-015, pp. 35-37. "High probability of being CARE eligible" is defined as households that have at least an 80 percent probability (or top two deciles) of being CARE-eligible as identified by each IOU's probability model.

[20] D.21-06-015, Ordering Paragraphs 27-29.

[21] D.21-06-015, Ordering Paragraph 13.

[22] D.21-06-015, Ordering Paragraph 7.

several of the major new disconnection protections implemented by the Commission are targeted only at CARE- and FERA-enrolled customers, they do not protect CARE- and FERA-eligible customers who are removed due to non-response to income verification efforts.

Since the pause in income verification due the pandemic,[23] CARE enrollment has risen. Currently, it is higher than the previously estimated eligible population.[24] Notably, the time delay in the eligibility studies may mean that these figures simply signify that the pool of eligible customers has also increased during the pandemic. Regardless, an increase in enrollment does not negate the fact that disenrollment from the program due to non-response to verification requests can have severe impacts for customers, as further described below.

After the issuance of D.21-05-006, Cal Advocates became aware that as a result of the IOUs' income verification requests, a high percentage of non-responders were dropped out of CARE and FERA. Between October 2021 and March 2022, Cal Advocates served data requests to each IOU. These data requests focus on issues including arrearages and disconnections for customers who do not respond to income verification, as well as information on the IOUs' income verification algorithms. This information was not available to Cal Advocates before the issuance of D.21-05-006. Based on the new facts collected through these data requests and analysis conducted based on the new data, Cal Advocates requests that D.21-05-006 be modified to address the new facts and changed circumstances.

III. STANDARD FOR MODIFICATION OF FINAL COMMISSION DECISION

The Commission has the statutory authority to modify its prior orders or decisions upon notice to the parties to the prior proceeding and after giving them an opportunity to

[23] Resolution M-4842.

[24] February 2022 Monthly Low Income Program Reports. Table 4 reports CARE enrollment at 109% (PG&E), 113% (SoCalGas), and 113% (SD&E) of the total eligible population.

be heard.[25] Pursuant to Rule 16.4(b), a party may request modifications to a decision upon showing justification for the requested relief and proposing specific wording to carry out the requested modifications. Rule 16.4(b) further requires that any factual allegations be supported with specific citations to the record in the proceeding or to matters that may be officially noticed, and allegations of new or changed facts must be supported by an appropriate declaration or affidavit.[26] When the corrected factual data would necessarily change the result reached in a Commission decision, a modification of that decision would be necessary. Rule 16.4 offers a clear path to do that.[27]

In Appendix A, Cal Advocates proposes specific changes to Finding of Facts and Ordering Paragraphs of D.21-05-016. Cal Advocates supports its allegations of new and changed facts and changed circumstances with citations to the record, the IOUs' responses to Cal Advocates' data requests, the Commission's recent decisions, the IOUs' advice letters dated after D.21-06-015, and the Declaration of Adam Buchholz in Appendix B.

IV. DISCUSSION

A. New Facts Show that a Significant Number of Eligible Customers Are Removed from CARE/FERA Every Year Due to the IOUs' Income Verification Process.

Historically, the IOUs' annual CARE income verification processes remove 480,000-600,000 households from the CARE program each year.[28] Around 90% of these households were removed because they failed to respond to the IOUs' income verification requests.[29] The IOUs' responses to Cal Advocates' data requests indicate

[25] Pub. Util. Code, § 1708.

[26] Rule 16.4(b); D.14-12-027, *Order Denying the Application for Rehearing of D.14-09-019*, p. 3.

[27] D.14-05-034, *Order Denying Rehearing of D.13-12-053*, p. 6.

[28] See the IOUs' data tables in their Annual CARE/ESA Reports for PYs 2018 and 2019.

[29] These customers are referred to as "non-responders" throughout this Petition. See the IOUs' Annual CARE/ESA Reports for PYs 2018 and 2019. In 2018, utilities removed 575,000 customers from CARE, 89.7% of whom did not respond to verification requests. In 2019, 91.1% of the 480,000 removed customers did not respond to verification requests.

that overall, 47% of customers selected for verification in 2017 and 2018[30] did not respond to the IOUs' verification requests.[31] The non-response rate varies between the three types of income verification: recertification has a non-response rate of approximately 32%; PEV has a non-response rate of 58%; and HU-PEV has an 88% non-response rate.[32] Together, these processes removed more than one million non-responding households from CARE in 2017 and 2018.[33] These response and removal rates reflect the difficulty of staying on CARE associated with the three types of verification. Specifically, recertification, with its minimal time burden, has the lowest non-response rate, while HU-PEV's requirement to enroll in ESA and provide documentation proving eligibility has the highest non-response rate. However, because recertification applies to many more households than PEV or HU-PEV, it led to far more (nearly 650,000 thousand) removals from CARE in 2017 and 2018 than PEV or HU-PEV.[34]

Attrition is also a major problem for FERA. While FERA program attrition has not been generally reported, PG&E's 2019 annual report indicates that its FERA recertification rate was *only 19 percent* in 2019.[35] In its December 2021 Advice Letter, PG&E noted that the pandemic-related halt to recertification and PEV was a "key driver" of a recent 17% year over year increase in enrollment penetration. According to PG&E, "…despite increases in marketing and concentrated effort towards continuous improvement, *had recertification and post-enrollment verification been active in 2021,*

[30] Because Cal Advocates' research was focused on the impacts of removal from CARE for 12 months following removal, the data requests referenced in this Petition focused on customers removed from CARE in 2017 and 2018. Many customers who were removed from CARE in 2019 received pandemic-related protections preventing their disconnection and, therefore, are not representative of the norm.

[31] See Appendix B, Attachments 2-9, the IOUs' responses to Cal Advocates' Data Requests.

[32] See Appendix B, Attachment 1, Figure AC-4.

[33] See Appendix B, Attachment 1, Figure AC-5.

[34] See Appendix B, Attachment 1, Figure AC-5.

[35] PG&E 2019 FERA Annual Report for PY 2019, dated Apr. 21, 2021, p. 17 fn. 16.

the final penetration rate would have been lower based on historical attrition rates." (Emphasis added.)[36]

B. New Evidence Suggests That Most Non-Responders Are Actually Qualified for CARE and Removal Leads to Significant Financial Impacts.

Cal Advocates recently discovered new evidence that non-responders face significant negative financial impacts within one year of removal from CARE.[37] The fact that these impacts occur at a far higher rate than for non-CARE customers suggests that these non-responders were erroneously removed. Furthermore, the fact that 29% of non-responders removed from CARE in 2017 and 2018 returned to CARE within 12 months,[38] indicates that at least one third of those removed from CARE through the reverification processes were misidentified and should not have been removed. Notably, these new data align with the 2019 Low Income Needs Assessment (LINA) study's finding that at least 54% of customers removed from CARE still qualify.[39]

1. Removing Non-Responders From CARE Has Led to Severe and Increasing Financial Impacts on Removed Customers.

Cal Advocates discovery through data requests on the financial impacts on CARE customers show that non-responding CARE customers have far higher arrearage and disconnection rates than non-CARE customers. Arrearages and disconnections are three and five times more likely, respectively, among non-responders than among non-CARE customers. Figures B-1 and B-2 show the significantly higher rate of these impacts among non-responders compared to enrolled CARE customers and non-CARE

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[36] Appendix B, Attachment 10, PG&E Advice Letter 6434-E, p. 4.

[37] See discussion, below. While the data presented in this Petition are generally focused on CARE, FERA's low recertification response and penetration rates mean that the FERA program would benefit from the same solutions proposed in Section V of this Petition.

[38] The IOUs' response to Cal Advocates' Data Request, DR-CARE-PGE-01, DR-CARE-SCE-01, DR-CARE-SDGE-01, DR-CARE-SCG-01 (Appendix B, Attachments 2-5).

[39] 2019 LINA Final Report, Volume 1 of 3: Summary of Key Findings, p. 4. Note that the 2019 LINA evaluated customers removed between 2015 and 2018, but only assessed 2017 incomes. Thus, it is not an exact match for eligibility at time of verification, but it is the best available estimate.

customers. These CARE non-responders represent approximately **10% of all disconnections.**[40] The fact that removed customers have far higher arrearage and disconnection rates than non-CARE customers suggests that they are a highly vulnerable population.

Figure B-1

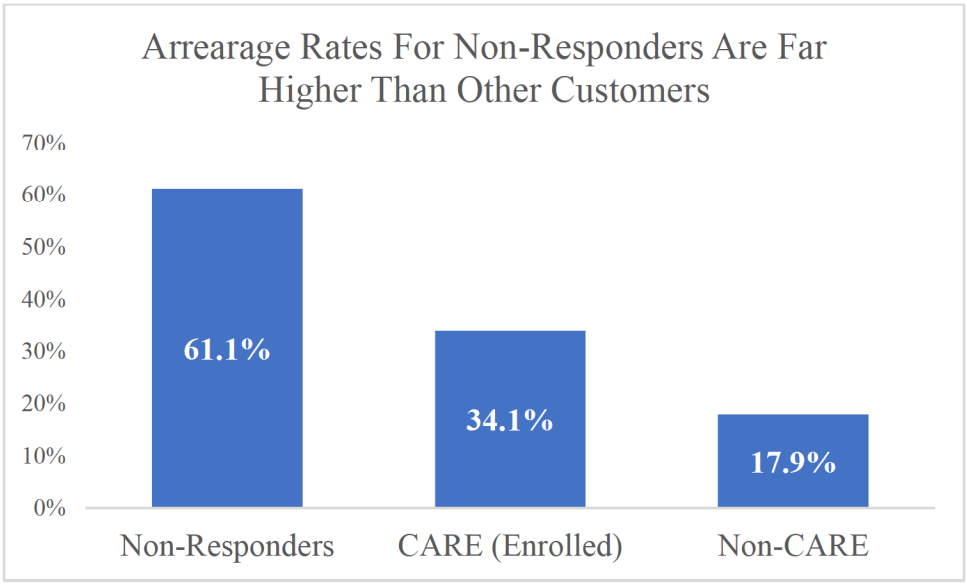

Figure B-1. The percentage of "non-responders" (customers who are removed from CARE for non-response) who fall into arrears within 12 months of being removed from CARE is far higher than CARE-enrolled and non-CARE customers, indicating that the verification process is removing qualified customers at a high rate. CARE and non-CARE arrearage rates are the average for 2018 and 2019 for all four IOUs. See Appendix B, Attachment 1 for rates broken out by IOU, and for disconnection rates by type of verification.

[40] The IOUs' responses to Cal Advocates' data requests indicate that 95,364 non-responders were disconnected within 12 months of removal from CARE in 2017 and 2018. Assuming disconnections were evenly spread over the two years following these removals from CARE, that means 47,682 customers were removed per year. Data requests also indicate that there was an average of 430,424 disconnections per year, 2017-2019, excluding non-responders. With non-responders, the total number of disconnections was 478,106 per year. 47,682 is 9.97% of this total.

Figure B-2

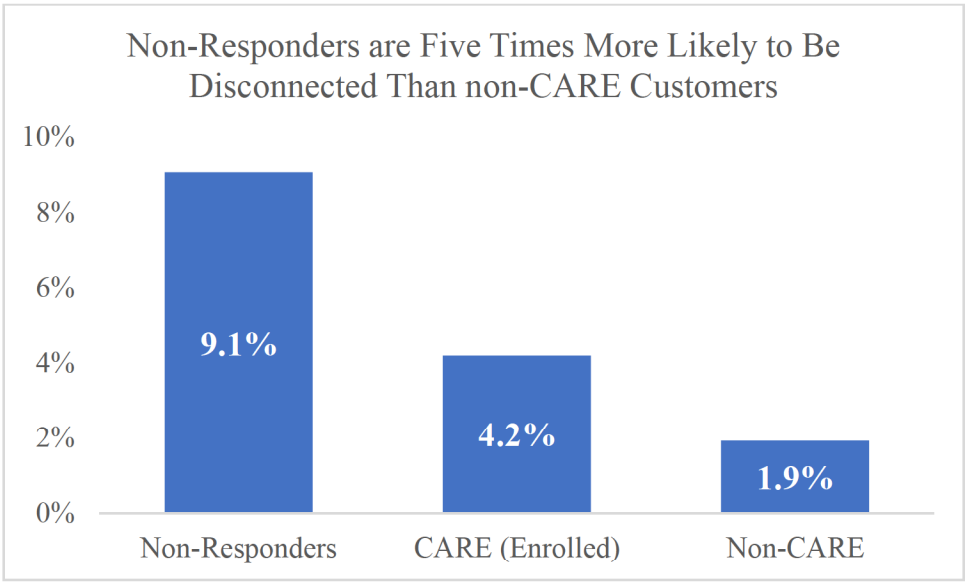

Figure B-2. The percentage of non-responders who are disconnected within 12 months of being removed from CARE is far higher than CARE-enrolled and non-CARE customers, indicating that the verification process is removing qualified customers at a high rate. CARE and non-CARE arrearage rates are the average for 2017-2019 for all four IOUs. See Appendix B, Attachment 1 for rates broken out by IOU, and for disconnection rates by type of verification.

SoCalGas has a particularly problematic practice. SoCalGas penalizes non-responders by billing them for the value of the discount for the previous three months.[41] Non-responders that successfully re-enroll (which indicates that they were eligible when removed), are not credited back for the lost CARE discount.[42]

The IOUs restarted income verification and recertification activities following the pause due to the COVID-19 Pandemic. The IOUs project that they will send 1.8 to 2.1

[41] See SoCalGas's response to Cal Advocates' Data Request, DR-CARE-SCG-01 (Appendix B, Attachment 4). This amounted to an average of $26.80 per household in 2019.

[42] See the IOUs' responses to DR-CARE-01 and DR-CARE-SDGE-03 and DR-CARE-SCE-03. (Appendix B, Attachments 2-5, 12, 14.)

million verification requests to households this year.[43] [44] If the patterns from 2017 and 2018 persist, this will lead to almost 600,000 removals from CARE and 140,000 arrearages. This will lead to tens-of-thousands of disconnections.[45] The evidence suggests that most of these households will be CARE-eligible and vulnerable to disconnections in spite of recent efforts to reduce disconnection rates. Specifically, only enrolled CARE and FERA customers are eligible for Arrearage Management Plan[46] or Percentage of Income Payment Plan protections.[47] Non-responders will no longer be eligible for these protections. While 12-month payment plans allowed in D.20-06-003 may help some non-responders avoid disconnection, if they are CARE or FERA-eligible they may be unable to afford their significantly increased monthly bills on top of paying their arrearage, and will be disproportionately represented among disconnected customers. D.20-06-003 also requires the IOUs to increase their efforts to enroll eligible households at risk of disconnection into programs like CARE and FERA.[48] However, the 2019 LINA study indicates that removed, but eligible, households have a much harder time than other households in at least the following respects: 1) understanding what information is needed to stay on CARE, 2) gathering the required information, 3) completing the application even after gathering the required information, and

[43] Appendix B, Attachments 2-5. A range of estimates is reported because conversations with SCE indicate that they may have over-stated the number of recertification requests by including "duplicate" recertifications in their estimate: customers who recertify without being required to do so.

[44] The IOUs sent approximately 1.6 million verification requests to households in 2018.

[45] While D.20-06-003 and D.21-10-012 recently implemented new efforts to reduce disconnections, several significant protections apply only to CARE and FERA customers. Non-responders are no longer on CARE and will not receive these protections. If IOUs prioritize disconnections in order of the amount due, non-responders will be over-represented because the PEV algorithm targets households with high bills in disconnections.

[46] Resolution E-5114, *Approval of Arrearage Management Plans for Large Investor-Owned Electric and Gas Utilities,* December 17, 2020, p. 4.

[47] D.21-10-012, *Decision Authorizing Percentage of Income Payment Plan Pilot Programs,* Attachment A p. 2: "PIPP pilot participants must comply with CARE income verification and reverification rules."

[48] D.20-06-003, Ordering Paragraph 10.

4) submitting the application to the IOU.[49] Thus, simply making them aware that they *may* be eligible for CARE/FERA is not likely enough to get them enrolled.

The IOUs' responses to Cal Advocates' March 2022 data requests indicate that changes made in D.21-06-015 have not significantly changed the non-response or arrearage rates. Since July of 2021, the IOUs CARE verification requests have an overall non-response rate of 36.4 percent and 37.4 percent of these non-responders have entered arrears. This is consistent with, and possibly higher than, arrearage rates of non-responding customers removed from CARE in 2017 and 2018.[50] These preliminary estimates[51] strongly suggest that D.21-06-015 did not alleviate the problem.

2. New Evidence Suggests That At Least One-Third of Removed Customers Qualify for CARE.

Cal Advocates confirmed through the IOUs' responses to data requests that 29% of the non-responders in 2017 and 2018 returned to CARE within one year of their removal, with a majority of these customers enrolling within 6 months.[52] This provides a conservative estimate of the rate of removing eligible customers: while at least this many non-responders were qualified when they were removed and re-enrolled quickly, many non-responders never re-enroll.[53]

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[49] 2019 LINA Final Report, p. 25, Figure 2.

[50] The arrearage rates reported in Figure B-1 indicate that 61.1% of customers who do not respond to verification requests in 2017 and 2018 entered arrears within 12 months. Because verification only restarted in July of 2021, we do not have 12 months of data on all customers removed from CARE. However, DR-CARE-01 also requested arrearage rates for customers within 6 months of their removal. For customers removed in 2017 and 2018, only 19.1% entered arrears within 6 months of removal. Less than 6 months have elapsed since removal from CARE for most customers reported in DR-CARE-03 (for example, PG&E only included data until January 2022 in their response), which indicates that arrearages may be occurring at a significantly higher rate for customers removed in 2021 than in 2017 and 2018 (37.4% in 2021 compared to 19.1% for 2017 and 2018). See DR-CARE-03 Question 4. Note that these estimates exclude SCE - at the time of filing, SCE had not reported these values to Cal Advocates.

[51] Because verification only restarted in July of 2021, there is no data on the longer-term impacts of removal on customers. In addition, some customers who received verification requests at the end of 2021 were still within their response windows at the time of the data request, which further biases the nonresponse rate downwards.

[52] See The IOUs' responses to Cal Advocates' data requests, Appendix B, Attachments 2-5.

[53] See 2019 LINA Final Report, p. 25, Figure 2 for possible reasons customers do not re-enroll. Removed customers have a harder time understanding and submitting the required documentation.

3. Cal Advocates' Conclusion That Most Non-Responders Are Indeed CARE-eligible Is Supported by the Record in this Proceeding and Other Studies.

The record in this proceeding and other studies support Cal Advocates' finding that most customers who are removed from CARE are eligible for the program. For example, the 2019 LINA study shows that 54% of customers who were removed from CARE were income-eligible at the time of the study.[54] Specifically, the LINA study shows that 70% of those removed at PEV, 55% removed at HU-PEV, and 44% removed at recertification are reportedly eligible for CARE and removed for reasons other than ineligibility.[55] Striking though they are, these results are likely to underestimate the problems.[56] The 47% of customers who do not respond to verification[57] after multiple reminders and contact attempts, are likely to have significant overlap with customers who did not respond to the LINA survey. The 54% of removed customers found to be CARE-eligible in the LINA study could be a significant underestimate.[58] The 2019 LINA study also identified many reasons, aside from ineligibility, that customers might not respond to verification requests. The two most common reasons were that responding to the requests was inconvenient,[59] or they did not know how to complete the process. Moreover, one-fifth of customers did not even know they had been removed.[60]

Results from other recent studies also support the conclusion that verification removes more qualified households than un-qualified. A 2021 study from the California

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[54] 2019 LINA Final Report, p. 3 and fn. 31.

[55] 2019 LINA Final Report, p. 4.

[56] 2019 LINA Final Report, p. 16.

[57] See Appendix B, Attachments 2-5, the IOUs' responses to Cal Advocates' Data Requests.

[58] Lower income is, in some cases, correlated with higher nonresponse rates. See, for example, "Factors associated with health survey response among young employees: a register-based study using online, mailed and telephone interview data collection methods" by Lalluka et al., https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-020-8241-8. Or "Income Disparities and Non-Response Bias in Surveys of Patient Experience" by Roberts et al., https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7351907/.

[59] 2019 LINA Final Report, p. 3.

[60] 2019 LINA Final Report, pp. 3-4.

Policy Lab, for example, shows that CalFresh's eligibility verification process, which is similar to, but more vigorous than, CARE's PEV process, removes up to three qualified Californians for each unqualified household it removes.[61]

C. The IOUs' Algorithms for Assessing CARE Eligibility Are Flawed, and Their Use Should Be Limited.

Due to fundamental flaws in their design, simply requiring changes to the IOUs' verification algorithms would not resolve the attrition and financial impact issues in the near-term. In many cases, the fundamental flaws stem from the fact that the IOUs do not possess some of the most relevant details about the economic and situational vulnerability of their customers,[62] so the IOUs' algorithms do not take these factors into consideration. Indeed, the tools used by the IOUs that are intended to improve accuracy by emphasizing factors associated with non-responses can have unintended and perverse outcomes (such as decreased likelihood of targeting wealthier customers for verification). Based on the IOUs' responses to Cal Advocates' recent data requests, Cal Advocates has identified at least the following potential flaws in their PEV algorithms:

- PEV algorithms are built on a biased dataset that is unlikely to include high-income customers who know they are not eligible for CARE, so they are unlikely to submit income documentation. As a result, these high-income customers will not be included in the training data for PEV algorithms.[63]

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[61] Matthew Unrath. "Targeting, Screening, and Retention: Evidence from California's Food Stamps Program," April 24, 2021, at https://mattunrath.github.io/files/research/Unrath_SNAP.pdf. See Figure 8 on p. 35, which reports ranges of eligible participants who leave the program under different sensitivities. The author could only observe quarterly earnings, but eligibility is calculated based on monthly earnings. Assigning all income to the single month of verification indicated that 55% of dropped participants still qualified. Under the more realistic assumption that quarterly income is spread evenly across the quarter, estimates range from 68-89%.

[62] In Statistics, this flaw is called omitted variable bias. The IOUs do not have, and should not collect, certain personal details about customers and therefore their algorithms will always be fundamentally lacking key information.

[63] See, for example, PG&E's response to Question 10 and 24 of DR-CARE-PGE-01. The algorithm is calibrated on customers who submitted income documentation for PEV but were found to be ineligible. Wealthy customers, who know they do not qualify, are unlikely to submit documentation when selected for PEV.

- SoCalGas's PEV algorithm[64] preferentially targets characteristics associated with vulnerable customers.
- The PEV algorithms' identification of high energy use as a key variable directs PEV efforts towards customers regardless of their financial situation, undercutting recent improvements to the HU-PEV process. This unfairly targets low-income customers, such as those with older homes that are less energy efficient, leading to significant negative impacts.

In sum, new evidence Cal Advocates discovered through data requests suggests that the current algorithms create a situation where the IOUs *do not know* who they are targeting, and the available evidence points to biases and harms to *qualifying customers* simply due to being *selected* for verification. As a consequence, six out of every ten customers selected for PEV are removed from CARE, and the majority of them fall behind on their bills within one year.[65] Consistent with the new evidence, the 2019 LINA study indicates that PEV, the most carefully targeted type of verification, also has the highest rate of removing qualified customers: 70% of customers removed through PEV were found to be eligible.[66]

The current "targeted" approach is counterproductive. Sampling bias and current methods of measuring "improvement" are biasing these algorithms towards the wrong households as demonstrated by the evidence presented above. Given the potential flaws and dramatic negative impacts from current algorithms, the Commission should minimize their use until a reasonable and unbiased long-term solution becomes available.

V. PROPOSED MODIFICATIONS TO D.21-06-015

In light of the new evidence identified above, Cal Advocates' requests that the Commission modify the Findings of Facts of D.21-06-015 to acknowledge that: (1) the

[64] Appendix B, Attachment 4. SoCalGas appears to include non-responders in its algorithm's training data, which may be why the utility specifically targets WIC participants and customers who have been late on their bills.

[65] The IOUs' responses to Cal Advocates' data requests (Appendix B, Attachments 2-5).

[66] 2019 LINA Final Report, p. 4.

IOUs' income verification processes impose unreasonable barriers for eligible customers to participate in CARE and FERA; (2) eligible households suffer severe negative financial impacts when erroneously removed from CARE and FERA; and (3) the current post-enrollment verification algorithms include high usage as a variable, which undercuts improvements to the high usage verification process.

Cal Advocates further requests that the Commission modify the Ordering Paragraphs, including:

- Authorize the IOUs to update their propensity and probability models to account for bias in the underlying training data via Tier 2 Advice Letters.
- Require the IOUs to conduct an outbound call pilot for households selected for recertification.
- Suspend all CARE and FERA income verification for at least 6 months, which can be extended, until a more efficient and less burdensome income verification process is developed;
- Direct the IOUs to collaborate with interested parties to develop a more efficient and less burdensome income verification process to replace the current process, and have them provide quarterly updates to the Commission;
- Direct the IOUs to work with interested parties to identify how to improve existing verification methods to meaningfully reduce the likelihood of inappropriate removal from CARE/FERA;
- Require the IOUs to immediately and automatically re-enroll all customers removed from CARE/FERA due to their non-response to income verification requests since July 2021, and return any lost discounts and back-charges to these customers;
- Prohibit the IOUs from back-charging customers who are removed from CARE or FERA; and
- Require the IOUs to credit customers who do not respond to verification requests, but who re-enroll within three billing cycles and demonstrate eligibility, with the missed CARE or FERA discount.

While the CARE and FERA income verification process is halted, the Commission should direct exploration of various potential long-term solutions in

collaboration with the IOUs, the Commission and other state agencies. Potential long-term solutions should include:

- Creating a data-sharing pipeline within state agencies to automatically verify and enroll customers in CARE, FERA, and other low-income programs;
- Initiating a rulemaking proceeding to fully investigate the reasonableness of the IOUs' PEV algorithms and income verification process; and
- Directing the Energy Division staff to discuss appropriate vehicles to improve the income verification processes through public meetings and workshops.

VI. CONCLUSION

For the foregoing reasons, Cal Advocates respectfully requests that that the Commission modify D.21-06-015 to adopt Cal Advocates' proposed modifications to the Findings of Fact and Ordering Paragraphs. These modifications are critical to ensure that CARE and FERA eligible customers are not inappropriately removed from the programs and to prevent severe and irreparable harm.

Respectfully submitted,

/s/ **CRYSTAL YU**

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Attorney

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Email: Crystal.Yu@cpuc.ca.gov

April 15, 2022

APPENDIX A

(Proposed Changes to the Proposed Decision's Findings of Fact, Conclusions of Law and Ordering Paragraph)

(Proposed Changes to the Proposed Decision's Findings of Fact, Conclusions of Law and Ordering Paragraph

(Additions to the PD are indicated in underline, deletions are indicated in strikeout text.

Finding of Facts:

10. Applying certain CARE program rules (including self-certification, categorical eligibility, post enrollment verification, and the income documentation processes and requirements) ~~decreases barriers to participation and/or protects the integrity of the program~~ can increase barriers to participation without protecting the integrity of the program.

21. Applying certain FERA program rules to be consistent with the CARE program (including self-certification, categorical eligibility, post enrollment verification, and the income documentation processes and requirements) may increase~~s~~ Utility efficiencies, ~~decreases~~ but increases barriers to participation ~~and/or protects~~ without protecting the integrity of the program.

62. The CARE and FERA eligibility verification processes (including post enrollment verification, recertification, and high usage income documentation) present unreasonable barriers to participants in the programs.

63. Including high usage as a variable in post enrollment verification algorithms undercuts improvements to the high usage verification process.

64. Erroneous removal from CARE causes rapid and extreme negative financial impacts to dis-enrolled customers.

65. Key disconnection protections extended in Resolution E-5114 and D.21-10-012 do not apply to dis-enrolled customers unless they re-enroll in the CARE and FERA programs.

Ordering Paragraphs:

8. Pacific Gas and Electric Company, Southern California Edison Company, and Southern California Gas Company are authorized to update their California Alternate Rates for Energy propensity and probability models to account for bias in the underlying training data.~~, with all the Utilities granted flexibility in making updates to their respective probability/propensity models without having to request authorization from the Commission, as long as these updates do not require budget expenditures beyond what is already approved.~~ Any updates made must be

approved via Tier 2 Advice Letter, with short narrative justifications for variable weights, and be reported in the monthly and annual compliance reports.

13. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and San Diego Gas & Electric Company must simultaneously conduct a coordinated six month to one year outbound call pilot ~~for "attempted but failed" post-enrollment verified households at a budget not to exceed $80,000 per utility (to be funded via each utility's existing authorized California Alternate Rates for Energy program outreach budgets for the respective year in which the pilot is being conducted),~~ for households selected for recertification, with a Tier 2 advice letter filing due at the end of the pilot term, and within three months of the pilot's conclusion.

X. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and the San Diego Gas & Electric Company shall immediately suspend all income verification programs for 6 months, which can be extended depending on the development of a more efficient and less burdensome income verification process.

X. The IOUs shall collaborate with interested parties to develop a more efficient and less burdensome income verification process to replace the current process and have them provide quarterly updates to the Commission.

X. The IOUs shall work with interested parties to identify how to improve existing verification methods to meaningfully reduce the likelihood of inappropriate removal from CARE/FERA;

X. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and the San Diego Gas & Electric Company shall immediately and automatically re-enroll any customers removed from CARE or FERA due to non-response to income verification requests since the reinstatement of verification processes in July 2021, and return any back-charges and missed discount in the form of a bill credit.

X. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and the San Diego Gas & Electric Company are prohibited from back-charging customers who are removed from CARE or FERA.

X. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and the San Diego Gas & Electric Company shall credit customers who do not respond to verification requests, but who re-

enroll within three billing cycles and demonstrate eligibility, with the missed CARE or FERA discount.

APPENDIX B

DECLARATION OF ADAM BUCHHOLZ

DECLARATION OF ADAM BUCHHOLZ

I, Adam Buchholz, declare the following:

1. I am a Senior Analyst at the Public Advocates Office at the California Public Utilities Commission. I am responsible for, among other things, policy on Net Energy Metering, low-income solar programs such as the Disadvantaged Communities Green Tariff, and the Self-Generation Incentive Program. I have personal knowledge of the facts set forth herein, to which I could testify competently if called upon to do so.

2. After D.21-05-006 was issued on June 7, 2021, Cal Advocates became aware that as a result of the IOUs' income verification requests, a high percentage of non-responders were dropped out of CARE and FERA. Therefore, under my direction and supervision, Cal Advocates served the first set of CARE and FERA data requests to each IOU on October 15, 2021, the second set of CARE and FERA data requests on December 17, 2021, and the third set of CARE and FERA data requests on March 1, 2022.

3. Attachment 1 contains figures and charts prepared by me or under my direction and supervision that are relied upon and cited to in Cal Advocates' Petition for Modification of D.21-06-015. The figures and charts are based on the IOUs' responses to Cal Advocates' Data Requests in Attachments 2-9, 11-14.

4. Attachment 2 is a true and correct copy of an excerpt of PG&E's response to Cal Advocates' Data Request, DR-CARE-PGE-01.

5. Attachment 3 is a true and correct copy of an excerpt of SCE's response to Cal Advocates' Data Request, DR-CARE-SCE-01.

6. Attachment 4 is a true and correct copy of an excerpt of SoCalGas's response to Cal Advocates' Data Request, DR-CARE-SCG-01.

7. Attachment 5 is a true and correct copy of an excerpt of SDG&E's response to Cal Advocates' Data Request, DR-CARE-SDGE-01.

8. Attachment 6 is a true and correct copy of an excerpt of PG&E's response to Cal Advocates' Data Request, DR-CARE-PGE-02.

9. Attachment 7 is a true and correct copy of an excerpt of SCE's response to Cal Advocates' Data Request, DR-CARE-SCE-02.

10. Attachment 8 is a true and correct copy of an excerpt of SoCalGas's response to Cal Advocates' Data Request, DR-CARE-SCG-02.

11. Attachment 9 is a true and correct copy of an excerpt of SDG&E's response to Cal Advocates' Data Request, DR-CARE-SDGE-02.

12. Attachment 10 is a true and correct copy of an excerpt of PG&E's Advice Letter 6434-E, submitted on December 15, 2021.

13. Attachment 11 is a true and correct copy of an excerpt of PG&E's response to Cal Advocates' Data Request, DR-CARE-PGE-03.

14. Attachment 12 is a true and correct copy of an excerpt of SCE's response to Cal Advocates' Data Request, DR-CARE-SCE-03.

15. Attachment 13 is a true and correct copy of an excerpt of SoCalGas's response to Cal Advocates' Data Request, DR-CARE-SCG-03.

16. Attachment 14 is a true and correct copy of an excerpt of SDG&E's response to Cal Advocates' Data Request, DR-CARE-SDGE-03.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct to the best of my knowledge.

Executed April 15, 2022 in San Francisco, California.

/s/ *Adam Buchholz*

Adam Buchholz

ATTACHMENT 1

Figure AC-1. Non-Responder Data Grouped By IOU

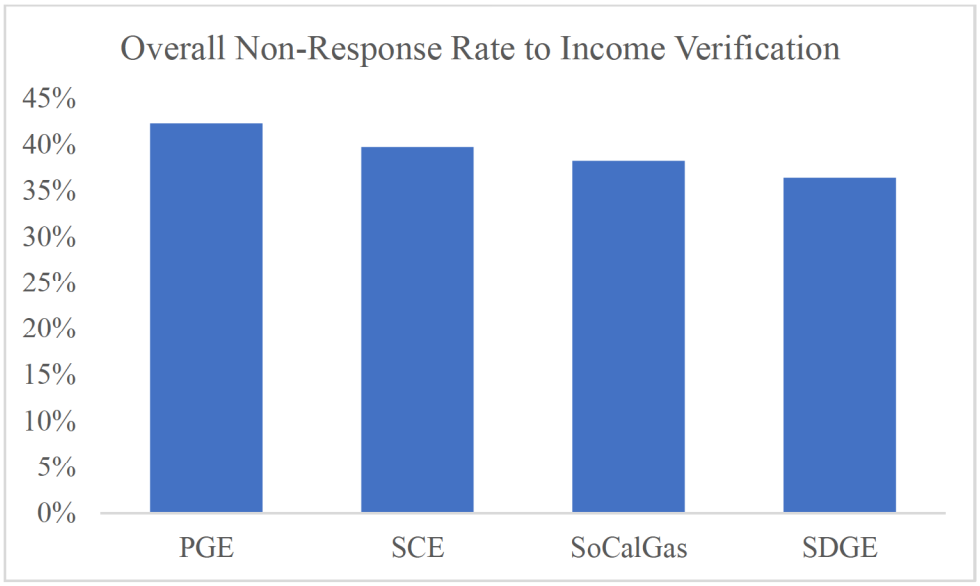

Figure AC-1. Non-response rates to income verification requests are consistently high across three of four utilities. Source: DR-CARE-PGE-01 and 02, CARE-SCE-01 and 02, CARE-SCG-01 and 02, and CARE-SDGE-01 and 02.

Figure AC-2. Arrearage Rates for Non-Responders

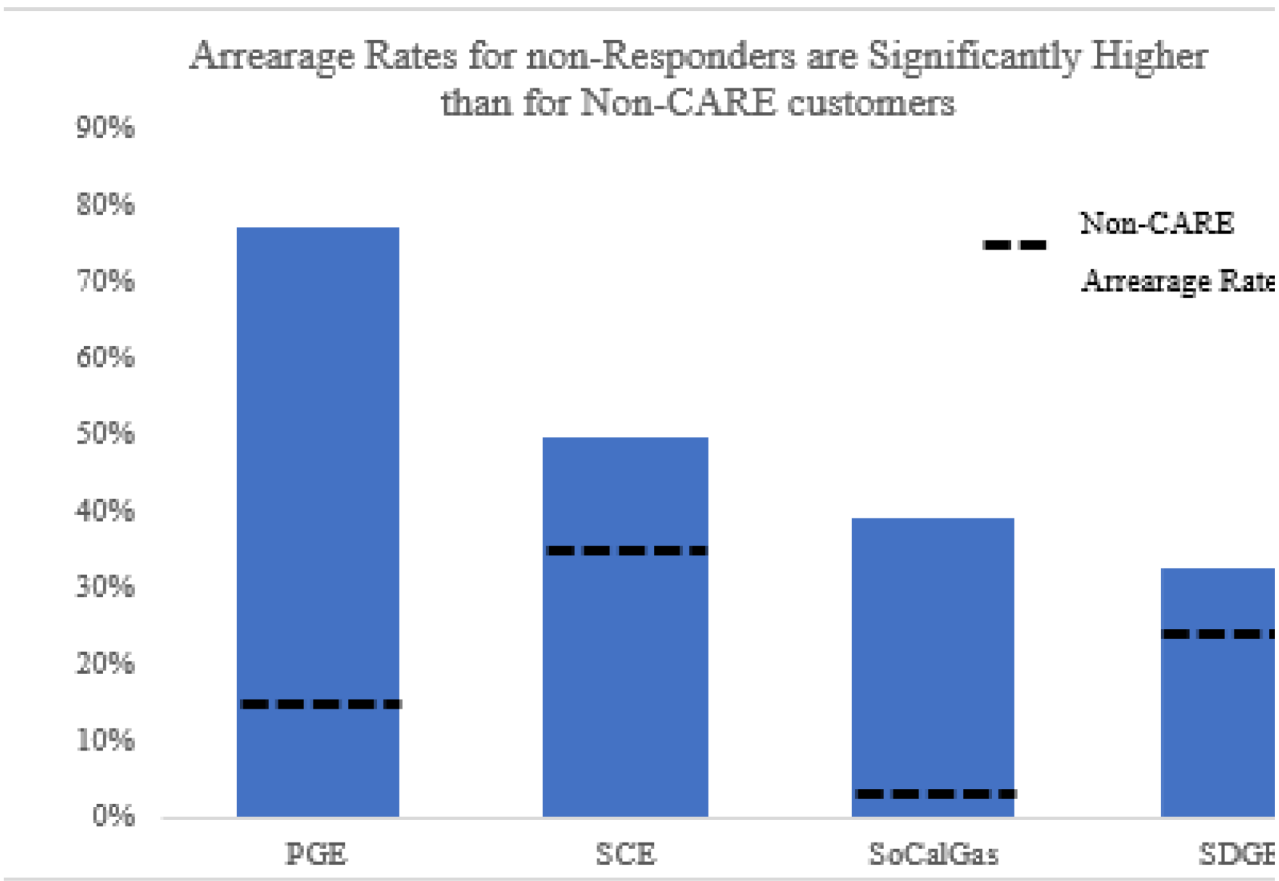

Figure AC-2. Arrearages within 12 months of non-response are significantly higher than average rates for non-CARE customers. At 77%, PG&E has the highest rate of arrearages among non-responders. In SCE's case, arrearage rates may be lower than CARE customers because the targeting algorithms are able to filter out the absolute lowest-income CARE customers. In SDG&E's case, arrearage data were only available from April 2018 onwards, which is likely to significantly understate the number of arrearages. CARE and non-CARE numbers are the average for 2017-2019, except for SDG&E, which only had data for 2018 and 2019. Note axis scales. Source: DR-CARE-PGE-01, CARE-SCE-01, CARE-SCG-01, and CARE-SDGE-01.

Figure AC-3. Disconnection Rates of Non-Responders

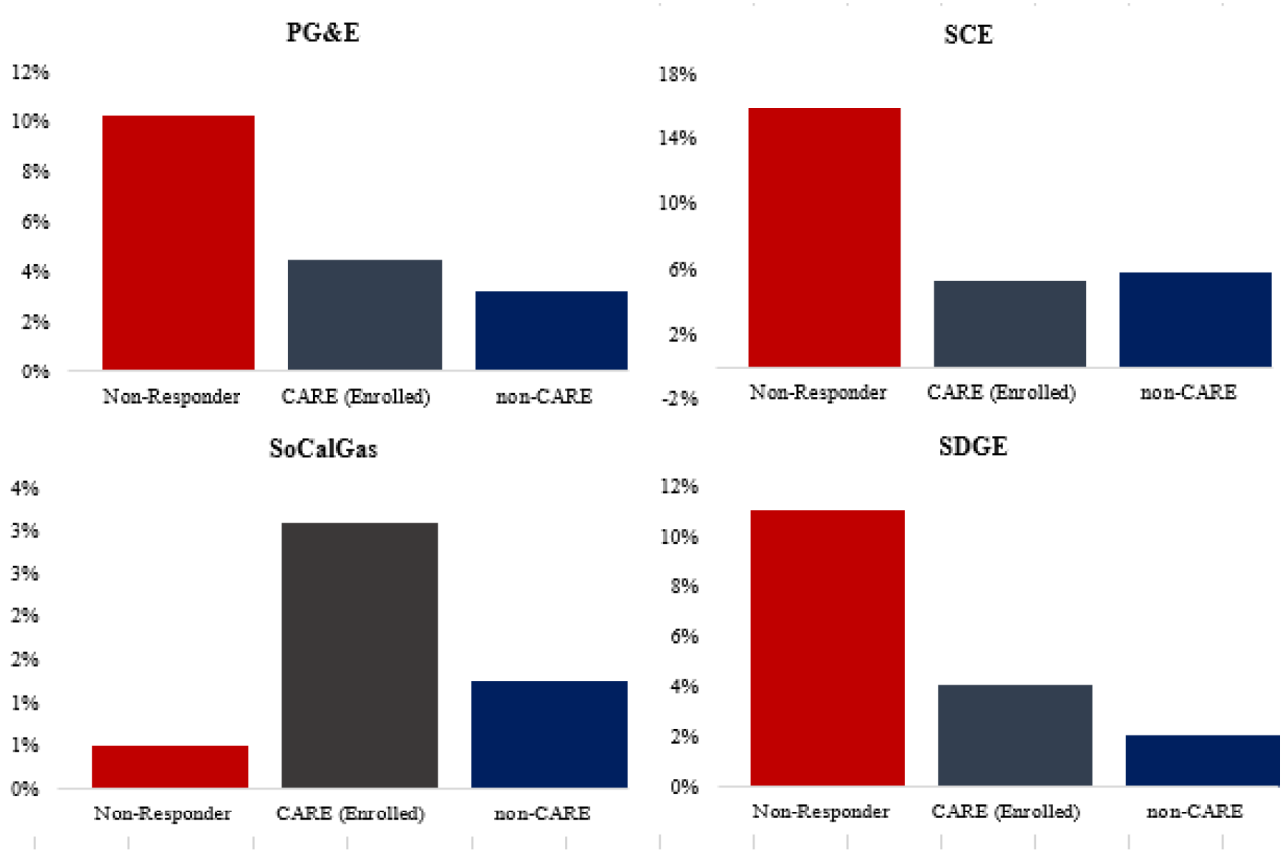

Figure AC-3. Disconnection rates within 12 months of non-response to income verification compared to CARE and non-CARE customers. Note that axes have different scales. With the exception of SoCalGas, disconnection rates within 12 months of non-response are far higher than CARE or non-CARE customers. Values for CARE and non-CARE customers are averages for 2017-2019. SoCalGas's lower rate of disconnection within 12 months of removal from CARE may be due to the need for a physical gas shut-off, which delays disconnections for longer than the 12-month period evaluated here. SoCalGas's arrearage rates for non-responders are 12.5 to 14 times higher than other customers (see Figure AC-2). Source: DR-CARE-PGE-02, CARE-SCE-02, CARE-SCG-02, and CARE-SDGE-02.

Figure AC-4 Non-Responder Data Disaggregated by Type of Verification

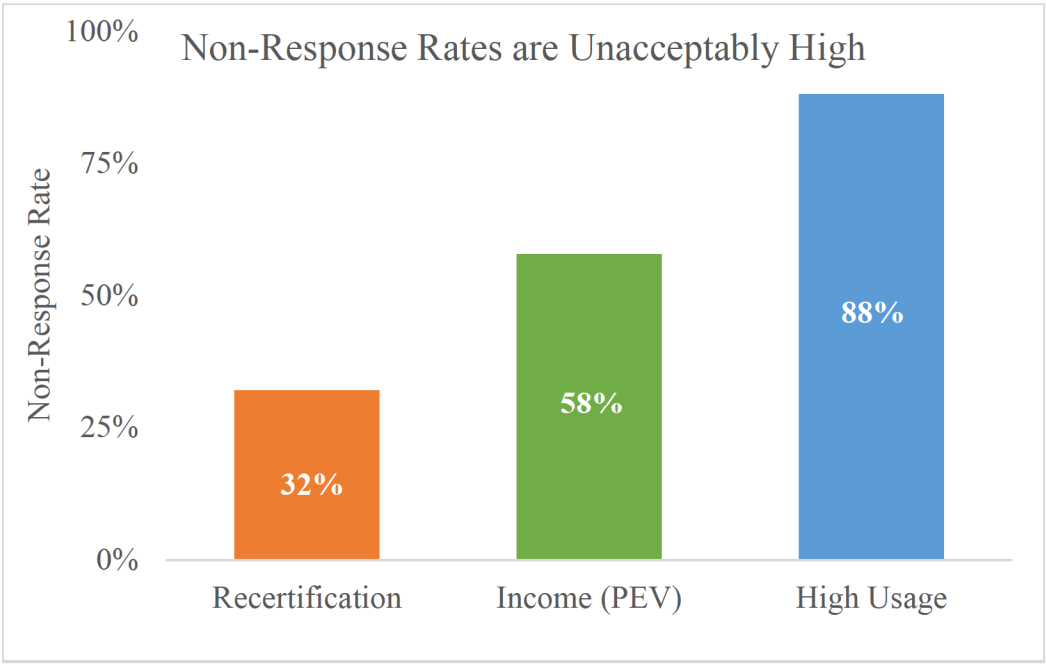

Figure AC-4. Non-response rates varied significantly by the type of income verification in 2017 and 2018. Selection for high-usage verification almost always leads to removal from CARE.

Figure AC-5. Households Removed from CARE Due to Non-Response

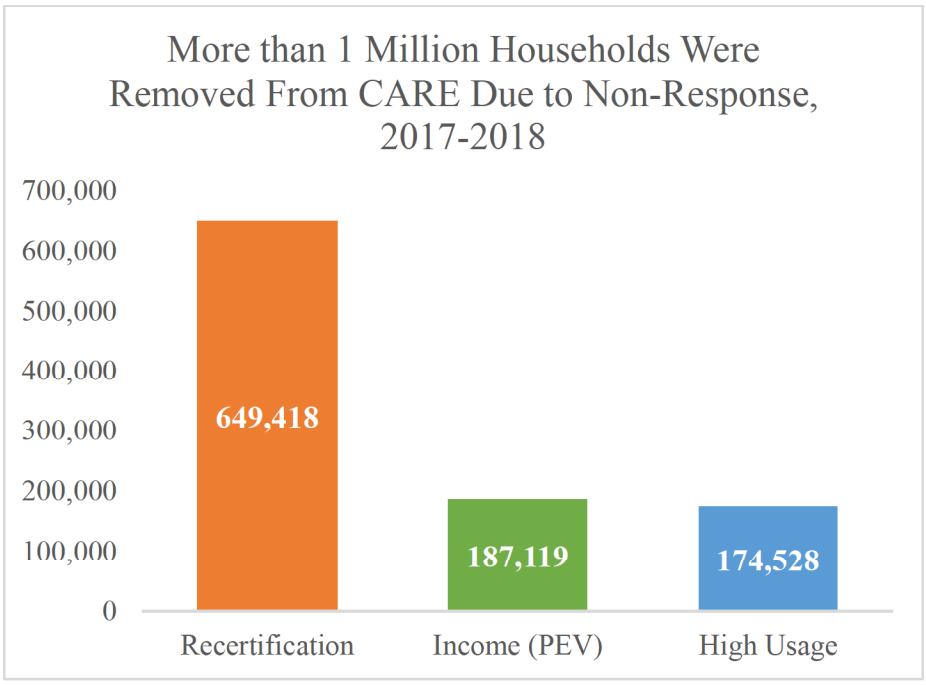

Figure AC-5. More than 1 million households were removed from CARE due to non-response to income verification. Assuming each household has the California average of 2.94 people per household, this represents 2.9 million people removed from CARE. This is roughly equivalent to the population of San Diego County, or three quarters of the City of Los Angeles.

Figure AC-6. Non-Response Rate by Type of Verification and IOU

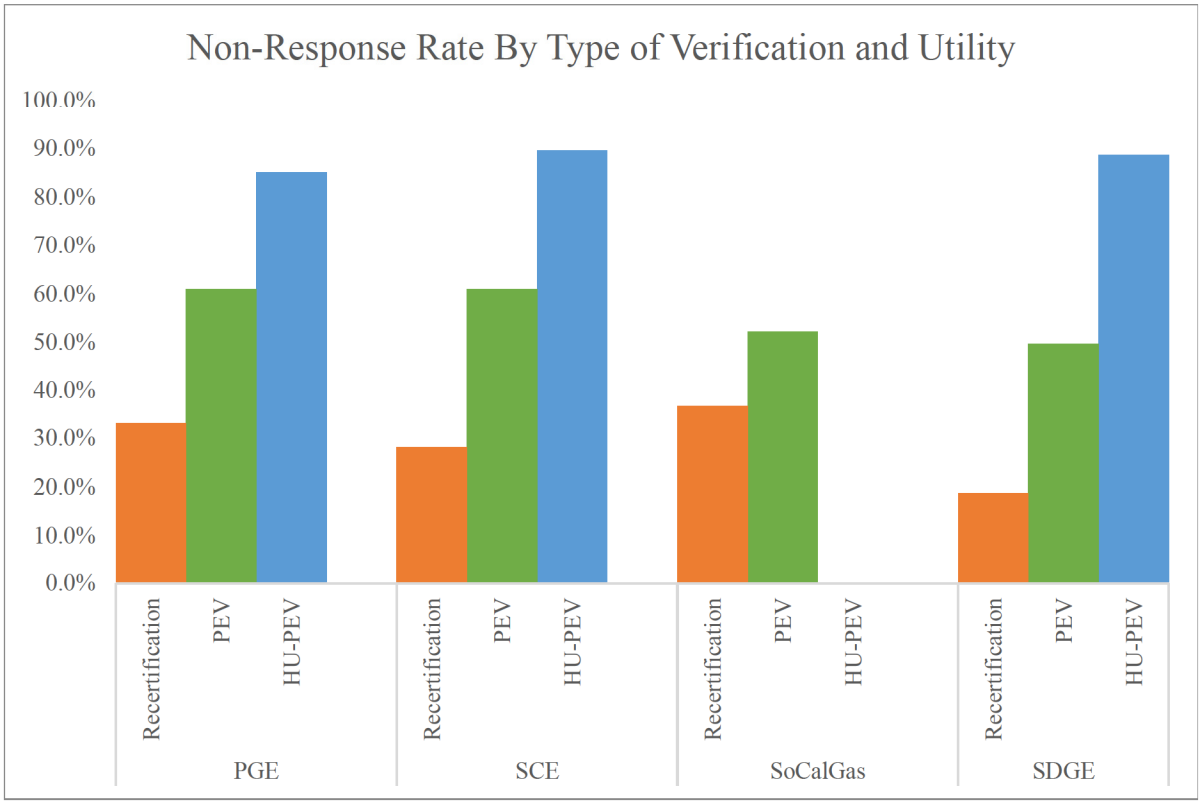

Figure AC-6. High non-response rates are consistently high across utilities. Source: DR-CARE-PGE-01 and 02, CARE-SCE-01 and 02, CARE-SCG-01 and 02, and CARE-SDGE-01 and 02.

Figure AC-7. Arrearage Rate by Type of Verification and IOU

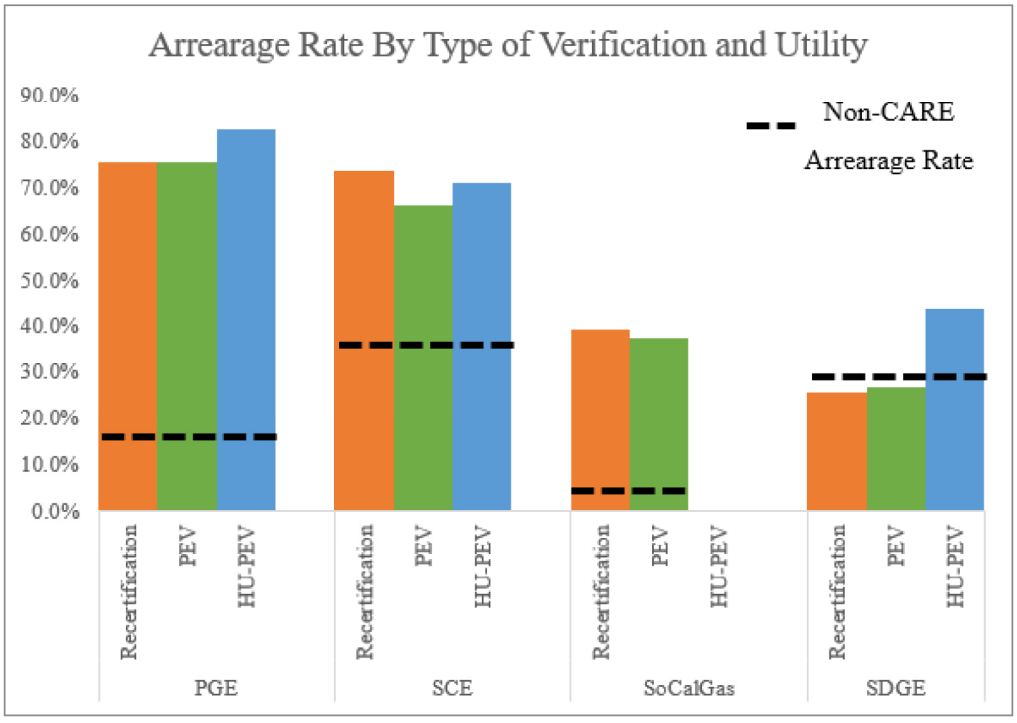

Figure AC-7. Arrearage rates vary by utility. In every case, non-responders experience arrearages at a higher rate than non-CARE customers (dashed line). Note that SDG&E did not have arrearage data prior to April 2018, which means that the above may significantly understate the number of arrearages. In SDG&E's case, the overall average rate of arrearages among non-responders is 32.3%, while the average for non-CARE customers is 28.0%. This suggests that these customers have lower incomes than non-CARE customers. Source: DR-CARE-PGE-01, CARE-SCE-01, CARE-SCG-01, and CARE-SDGE-01.

Figure AC-8. Disconnection Rate by Type of Verification and IOU

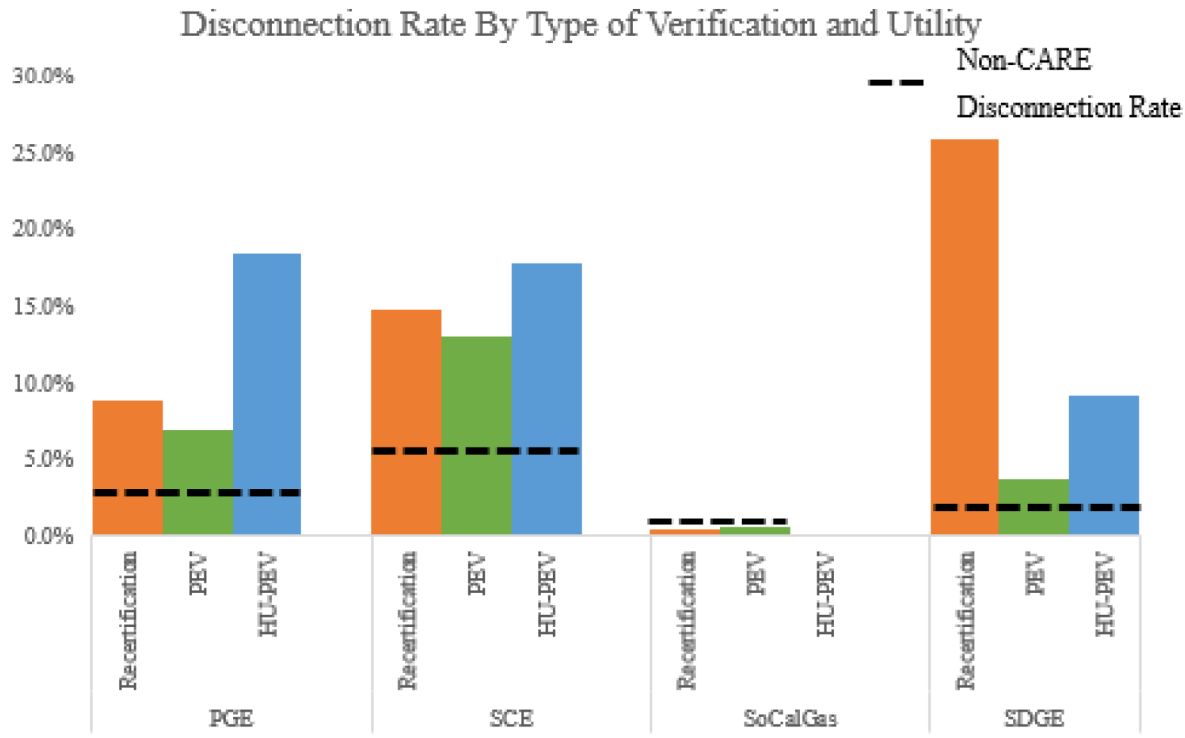

Figure AC-8. Disconnection rates within 12 months of non-response in 2017-2018 vary by type of income verification. Except for SoCalGas, disconnection rates are significantly higher than the average for non-CARE customers, 2017-2019. SoCalGas's lower rate of disconnection within 12 months of removal from CARE may be due to the need for a physical gas shut-off, which delays disconnections for longer than the 12-month period evaluated here. SoCalGas's arrearage rates for these customers are far higher than non-CARE customers, as shown in Figure AC-5. Source: DR-CARE-PGE-01 and 02, CARE-SCE-01 and 02, CARE-SCG-01 and 02, and CARE-SDGE-01 and 02.

Figure AC-9. Disconnection Rate by Type of Verification and IOU

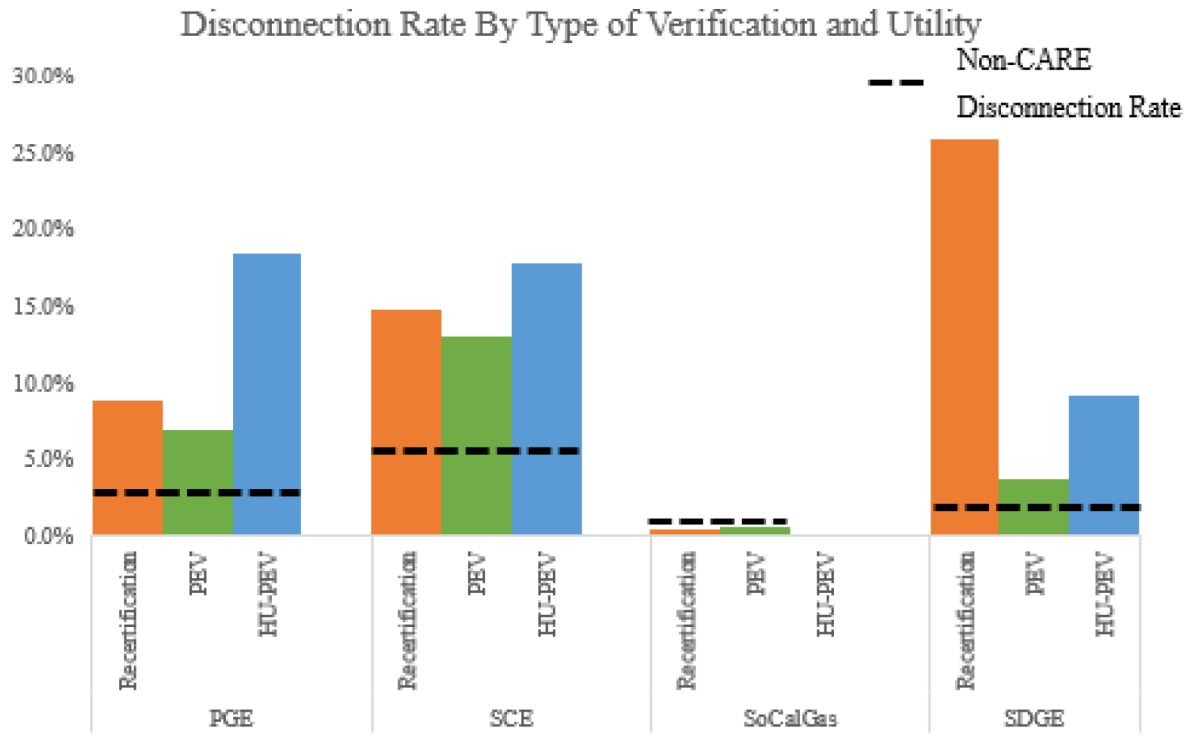

Figure AC-9. Disconnection rates within 12 months of non-response in 2017-2018 vary by type of income verification. Except for SoCalGas, disconnection rates are significantly higher than the average for non-CARE customers, 2017-2019. SoCalGas's lower rate of disconnection within 12 months of removal from CARE may be due to the need for a physical gas shut-off, which delays disconnections for longer than the 12-month period evaluated here. SoCalGas's arrearage rates for these customers are far higher than non-CARE customers, as shown in Figure AC-5.

Figure B-1

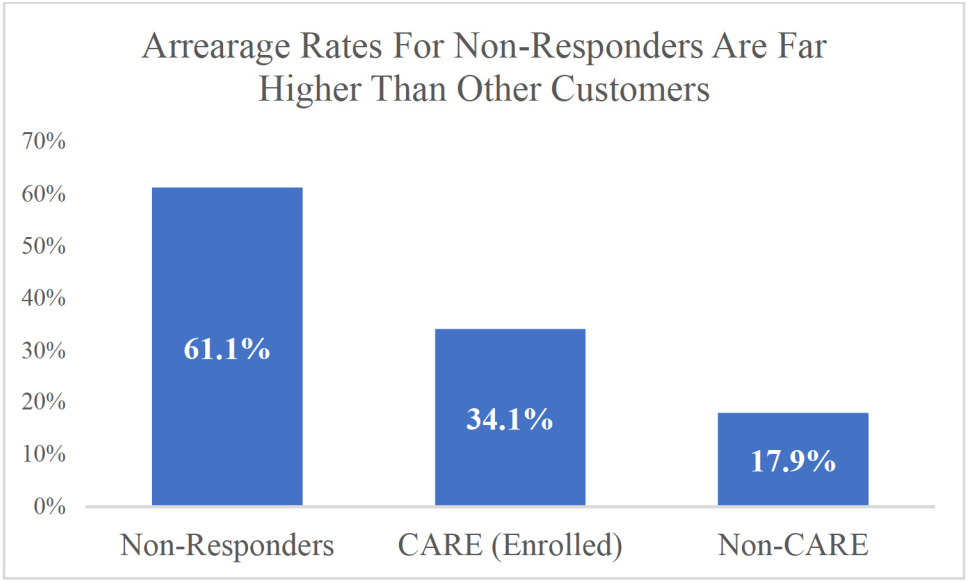

Figure B-1. The percentage of "non-responders" (customers who are removed from CARE for non-response) who fall into arrears within 12 months of being removed from CARE is far higher than CARE-enrolled and non-CARE customers, indicating that the verification process is removing qualified customers at a high rate. CARE and non-CARE arrearage rates are the average for 2018 and 2019 for all four IOUs. See Appendix B, Attachment 1 for rates broken out by IOU, and for disconnection rates by type of verification.

ATTACHMENT 2:

Excerpt of PG&E's response to Cal Advocates' Data Request, DR-CARE-PGE-01

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_028-Q01		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q01		
Request Date:	November 15, 2021	Requester DR No.:	Cal Advocates DR CARE-PGE-01
Date Sent:	December 1, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

Customers Removed from CARE Due to Failure to Respond

QUESTION 01

How many PG&E customers were removed from CARE due to non-response to recertification in 2017 and 2018? How many of those customers returned to CARE within 6 months? How many of those customers returned to CARE within 1 year? How many customers were removed from CARE due to non-response to recertification in total in 2017 and 2018?

- Please report each year separately, and respond with the cumulative total in each time frame. For example, a customer who was removed from CARE in September of 2017, and returned 5 months later, should be counted in both the "6 months" and the "1 year" columns for 2017 (columns C and D), but not in columns E and F.

ANSWER 01

Please see attachment “LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q01Atch01.”

Q1-3. How many customers removed from CARE due to non-response returned to the program within the indicated time frames? Please report each year separately, and respond with the cumulative total in each time frame. For example, a customer who was removed from CARE in September of 2017, and returned 5 months later, should be counted in both the "6 months" and the "1 year" columns for 2017 (columns C and D), but not in columns F and G.

	2017			2018		
	Total Removed in year	Returned within 6 months	Returned within 1 year	Total Removed in year	Returned within 6 months	Returned within 1 year
PG&E Response to Q01: Non-Response to Recertification	75,394	19,342	26,557	74,304	20,533	28,171
PG&E Response to Q02: Non-Response to Post-Enrollment Income Verification	33,139	5,165	7,397	21,819	4,400	5,706
PG&E Response to Q03. Non-Response to High Usage Verification	26,368	1,698	2,907	23,573	2,267	3,682

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_028-Q02		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q02		
Request Date:	November 15, 2021	Requester DR No.:	Cal Advocates DR CARE-PGE-01
Date Sent:	December 1, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

Customers Removed from CARE Due to Failure to Respond

QUESTION 02

Same as Q.1, but for non-response to PEV.

ANSWER 02

Please see attachment "LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q01Atch01."

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_028-Q03		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q03		
Request Date:	November 15, 2021	Requester DR No.:	Cal Advocates DR CARE-PGE-01
Date Sent:	December 1, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

Customers Removed from CARE Due to Failure to Respond

QUESTION 03

Same as Q.1, but for non-response HU-PEV.

ANSWER 03

Please see attachment "LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q01Atch01"

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_028-Q04		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q04		
Request Date:	November 15, 2021	Requester DR No.:	Cal Advocates DR CARE-PGE-01
Date Sent:	December 10, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

Customers Removed from CARE Due to Failure to Respond

QUESTION 04

Of the customers removed from CARE due to non-response to recertification **in 2017 and 2018**, how many entered arrears within 6 months? Within 1 year?

- Please report each year separately and respond with the cumulative total in each time frame. For example, a customer who was removed from CARE in September of 2017, and entered arrears 5 months later, should be counted in both the "6 months" and the "1 year" columns for 2017 (columns B and C), but not in columns D and E.

ANSWER 04

Please see attachment "LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q04Atch01."

Qs 4-6. Of the customers who were removed from CARE through the following processes, how many entered arrears within the indicated timeframes? Please report each year separately and respond with the cumulative total in each time frame. For example, a customer who was removed from CARE in September of 2017, and entered arrears 5 months later, should be counted in both the "6 months" and the "1 year" columns for 2017 (columns B and C), but not in columns D and E.

	2017		2018	
	6 months	1 year	6 months	1 year
4. Non-response to Recertification	40,211	57,363	40,230	55,672
5. Non-Response to Post-Enrollment Income Verification	18,743	24,196	13,698	17,247
6. Non-Response to High Usage Verification	15,864	21,296	14,836	19,869

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_028-Q05		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q05		
Request Date:	November 15, 2021	Requester DR No.:	Cal Advocates DR CARE-PGE-01
Date Sent:	December 10, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

Customers Removed from CARE Due to Failure to Respond

QUESTION 05

Same Q.4, but for customers removed due to non-response to PEV.

ANSWER 05

Please see attachment "LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q04Atch01."

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_028-Q06		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q06		
Request Date:	November 15, 2021	Requester DR No.:	Cal Advocates DR CARE-PGE-01
Date Sent:	December 10, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

Customers Removed from CARE Due to Failure to Respond

QUESTION 06

Same as Q.4, but for customers removed due to non-response to HU-PEV.

ANSWER 06

Please see attachment "LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q04Atch01."

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_028-Q07		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q07		
Request Date:	November 15, 2021	Requester DR No.:	Cal Advocates DR CARE-PGE-01
Date Sent:	December 10, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

Customers Removed from CARE Due to Failure to Respond

QUESTION 07

For comparison, what percentage of non-CARE customers entered arrears in 2017-2019? Please exclude those who were removed from CARE through recertification, PEV, or HU-PEV within the 12 months preceding the arrearage.

ANSWER 07

Please see the table below showing the percentage of PG&E non-CARE customers in arrears in 2017-2019, excluding those who were removed from CARE through recertification, PEV, or HU-PEV within the 12 months preceding the arrearage.

Year	Percentage of Non-CARE Customers in Arrears
2017	15.4%
2018	18.8%
2019	13.7%

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_028-Q08		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q08		
Request Date:	November 15, 2021	Requester DR No.:	Cal Advocates DR CARE-PGE-01
Date Sent:	December 1, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

Customers Removed from CARE Due to Failure to Respond

QUESTION 08

What percentage of CARE customers entered arrears in 2017-2019?

ANSWER 08

Please see the table below showing the percentage of PG&E CARE customers in arrears in 2017-2019.

Year	Percentage of PG&E CARE Customers in Arrears
2017	44.4%
2018	33.9%
2019	29.9%

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_028-Q09		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q09		
Request Date:	November 15, 2021	Requester DR No.:	Cal Advocates DR CARE-PGE-01
Date Sent:	December 1, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

Post-Enrollment Income Verification Algorithm

QUESTION 09

What variables does PG&E use to identify improvement in the algorithm used to identify customers for post-enrollment verification?

ANSWER 09

PG&E uses a consultant to identify improvements in the algorithm used to identify PG&E CARE customers for post-enrollment verification (PEV).

To measure improvement, PG&E/PG&E's consultant looks at the customer decile score assigned by the model to confirm that the customers in the top deciles are more likely to be ineligible for CARE than a set of randomly selected customers. Because the PEV model is built using a customer sample that consists of customers who have already completed the PEV process with a result of either "Denied" or "Approved," PG&E is able to evaluate the results from the model to the actual results of the customer set.

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_028-Q10		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q10		
Request Date:	November 15, 2021	Requester DR No.:	Cal Advocates DR CARE-PGE-01
Date Sent:	December 1, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

Post-Enrollment Income Verification Algorithm

QUESTION 10

What variables does PG&E use to identify customers for post-enrollment income verification?

ANSWER 10

PG&E's Post-Enrollment Verification (PEV) is based on random selection, high usage, and model selection.

For the model selection, over 600 variables representing customer characteristics were appended to the modeling universe[1] which consisted of approximately 25,000 customers solicited for Post Enrollment Verification (PEV), with a result of either "Denied" or "Approved."

- Types of variables included: Athens data (eligibility estimates), CARE Acquisition propensity model, program participation, payment patterns, usage, demographic and premise information using third party sources such as, Personicx Clusters (household segmentation from Acxiom), Geoscape (ethnicity and acculturation data), and Energy Efficiency Opportunity scores (model developed to compare PG&E customer energy use compared to peers in similar homes/climate zones)
- A logistic regression model was leveraged to compute the candidate variables against the dependent variable: CARE PEV Denied.

The regression modeling process tested multiple combinations of customer attributes to find the optimal list of predictors. This list included core demographics (e.g. age, ethnicity, income), geography (Athens data) and PG&E transactions/behaviors around billing and payments.

The PEV model looks at the attributes below for each residential customer to create a propensity score. The score is used to assign each customer to a decile (1-10).

[1] The "modeling universe" is the data used to develop a model.

Model Variable	Order of Importance	Directional Impact
Total Programs	1	Negative
High Electric Flag	2	Positive
LIHEAP Flag	3	Negative
G1 Rate Flag	4	Positive
CARE Auto-Enrollment Flag	5	Negative
Tenure (Months)	6	Positive
High Gas Bill Flag	7	Positive
E1 Rate Flag	8	Positive
TOU Flag	9	Positive
Rebate Flag	10	Positive
Online Purchase Indicator	11	Positive
HE1 Rate Flag	12	Positive
Pay in Person Flag	13	Negative
Home Market Value	14	Positive
English Language Preference	15	Positive
High Usage Alert Enrollment Flag	16	Positive
Count of IVR Calls	17	Negative
2019 CARE Propensity Score (Modeled)	18	Negative
Multi Service Agreement Flag	19	Positive
Eligibility Rate (Athens)	20	Negative
Health & Medical Interests	21	Positive
White Collar Occupation	22	Positive
Age 65+	23	Negative

In 2019, customers selected for PEV by the model were 68% more likely to be verified ineligible (deemed over income or requested removal from the program) than those randomly selected.

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_028-Q12		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q12		
Request Date:	November 15, 2021	Requester DR No.:	Cal Advocates DR CARE-PGE-01
Date Sent:	December 1, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

Forecast and Other Policies

QUESTION 12

How many PG&E customers will be subject to recertification over the next 12 months?

ANSWER 12

PG&E estimates that 490,000 customers will be subject to CARE recertification in 2022, with approximately 75,000 of those removed due to non-response.

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_028-Q13		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q13		
Request Date:	November 15, 2021	Requester DR No.:	Cal Advocates DR CARE-PGE-01
Date Sent:	December 1, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

Forecast and Other Policies

QUESTION 13

How many customers does PG&E estimate will be subject to post-enrollment income verification in the next 12 months?

ANSWER 13

PG&E estimates that 120,000 of PG&E's CARE customers will be subject to CARE post-enrollment verification in 2022, with approximately 95,000 of those removed due to non-response.

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_028-Q14		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q14		
Request Date:	November 15, 2021	Requester DR No.:	Cal Advocates DR CARE-PGE-01
Date Sent:	December 1, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

Forecast and Other Policies

QUESTION 14

D.21-06-015 made changes to the threshold over which customers are selected for high usage verification. If fewer customers are identified for HU-PEV in a given year, will PG&E increase the number of customers subject to post-enrollment income verification?

ANSWER 14

Yes, PG&E plans to adjust the post-enrollment verification (PEV) selection to achieve a total CARE PEV rate of at least 8 percent in 2022. The total rate is composed of those selected due to exceeding the high usage threshold, randomly, and the PEV Model.

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_028-Q15		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q15		
Request Date:	November 15, 2021	Requester DR No.:	Cal Advocates DR CARE-PGE-01
Date Sent:	December 1, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

Forecast and Other Policies

QUESTION 15

Are customers removed from CARE due to non-response to PEV back-billed to recover the CARE discount?

- If so, what is the average amount back-billed?
- If those customers return to CARE, is the back-billed amount returned to those customers?

ANSWER 15

PG&E does not currently back-bill its customers removed from CARE due to non-response to PEV.

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_028-Q22		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q22		
Request Date:	November 24, 2021	Requester DR No.:	Cal Advocates DR CARE-PGE-01
Date Sent:	December 10, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

QUESTION 22

What proportion of CARE customer accounts have a social security number (SSN) or individual taxpayer identification number (ITN) associated with the account?

ANSWER 22

As of December 3, 2021, approximately 83% of PG&E CARE customer accounts have the last four digits of a social security number (SSN) or individual taxpayer identification number (ITN) associated with the account.

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_028-Q23		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q23		
Request Date:	December 6, 2021	Requester DR No.:	Cal Advocates DR CARE-PGE-01 (Supplemental Questions)
Date Sent:	December 10, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

QUESTION 23

In the responses to Questions 9 and 10 of DR-CARE-PGE-01, do the "denied" customers used as test data include customers who did not respond to income verification requests?

ANSWER 23

In the responses to Questions 9 and 10 of DR-CARE-PGE-01, the "denied" customers used as test data do not include customers who did not respond to income verification requests.

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_028-Q24		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q24		
Request Date:	December 6, 2021	Requester DR No.:	Cal Advocates DR CARE-PGE-01 (Supplemental Questions)
Date Sent:	December 10, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

QUESTION 24

In PG&E's response to DR-CARE-PGE-01's question 10, please define how "deemed over income" is meant. Is a customer who does not respond to an income verification request included in those who are "deemed over income"?

ANSWER 24

In PG&E's response to DR-CARE-PGE-01's question 10, "deemed over income" is defined as customers who submitted income documentation reflecting total household income exceeding the CARE income guidelines. Customers who do not respond to an income verification request are not included in those who are "deemed over income."

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_028-Q25		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_028-Q25		
Request Date:	December 6, 2021	Requester DR No.:	Cal Advocates DR CARE-PGE-01 (Supplemental Questions)
Date Sent:	December 10, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

QUESTION 25

Please provide the variable weights or coefficients for each of the attributes used in the logistic regression model listed on Page 2 of PG&E's response to question 10 of DR-CARE-PGE-01.

ANSWER 25

The table below shows the variable weights for each of the attributes used in the logistic regression model listed on Page 2 of PG&E's response to question 10 of DR-CARE-PGE-01. The data in the table below is as of December 6, 2021.

Model Variable	Order of Importance	Directional Impact	Variable Weight
Total Programs	1	Negative	20.30%
High Electric Flag	2	Positive	9.80%
Low Income Home Energy Assistance Program (LIHEAP) Flag	3	Negative	7.70%
G1 Rate Flag	4	Positive	7.40%
CARE Auto-Enrollment Flag	5	Negative	6.10%
Tenure (Months)	6	Positive	5.50%
High Gas Bill Flag	7	Positive	4.40%
E1 Rate Flag	8	Positive	4.40%
Time of Use (TOU) Flag	9	Positive	3.80%
Rebate Flag	10	Positive	3.20%
Online Purchase Indicator	11	Positive	3.00%
HE1 Rate Flag	12	Positive	2.80%
Pay in Person Flag	13	Negative	2.50%
Home Market Value	14	Positive	2.40%
English Language Preference	15	Positive	2.40%
High Usage Alert Enrollment Flag	16	Positive	2.30%
Count of Interactive Voice Response (IVR) Calls	17	Negative	2.30%
2019 CARE Propensity Score (Modeled)	18	Negative	2.10%

Multi Service Agreement Flag	19	Positive	1.90%
Eligibility Rate (Athens)	20	Negative	1.80%
Health & Medical Interests	21	Positive	1.70%
White Collar Occupation	22	Positive	1.20%
Age 65+	23	Negative	0.90%

ATTACHMENT 3:

Excerpt of SCE's response to Cal Advocates' Data Request, DR-CARE-SCE-01

Southern California Edison

A.19-11-003 et al (A.19-11-004, A.19-04-005, A.19-04-006, and A.19-04-007) – PG&E Application for Approval of Energy Savings Assistance and California Alternate Rates for Energy Programs and Budgets for 2021-2026 Program Years.[CONSOLIDATION ALERT: A.19-11-003, A.19-11-004, A.19-11-005, A.19-11-006, A.19-11-007 are CONSOLIDATED]

DATA REQUEST SET Cal Advocates DR CARE-SCE-01

To: Cal Advocates
Prepared by: Anthony Abeyta
Job Title: CARE/FERA Program Advisor
Received Date: 11/12/2021

Response Date: 11/30/2021

Question 01-03:
1. How many SCE customers were removed from CARE due to non-response to recertification in 2017 and 2018?, How many of those customers returned to CARE within 6 months? How many of those customers returned to CARE within 1 year? How many customers were removed from CARE due to non-response to recertification in total in 2017 and 2018?

Please report each year separately, and respond with the cumulative total in each time frame. For example, a customer who was removed from CARE in September of 2017, and returned 5 months later, should be counted in both the "6 months" and the "1 year" columns for 2017 (columns C and D), but not in columns E and F.

2. Same as Q.1, but for non-response to PEV.

3. Same as Q.1, but for non-response HU-PEV.

Response to Question 01-03:

	2017			**2018**		
	Total Removed in year	Returned within 6 months	Returned within 1 year	Total Removed in year	Returned within 6 months	Returned within 1 year
1. Non-Response to Recertification	102,391	29,179	40,011	108,191	34,129	44,687
2. Non-Response to Post-Enrollment Income Verification	31,426	3,759	5,266	44,399	6,954	9,300
3. Non-Response to High Usage Verification	44,840	1,525	2,216	63,737	4,083	5,386

Southern California Edison

A.19-11-003 et al (A.19-11-004, A.19-04-005, A.19-04-006, and A.19-04-007) – PG&E Application for Approval of Energy Savings Assistance and California Alternate Rates for Energy Programs and Budgets for 2021-2026 Program Years.[CONSOLIDATION ALERT: A.19-11-003, A.19-11-004, A.19-11-005, A.19-11-006, A.19-11-007 are CONSOLIDATED]

DATA REQUEST SET Cal Advocates DR CARE-SCE-01

To: Cal Advocates
Prepared by: Anthony Abeyta
Job Title: CARE/FERA Program Advisor
Received Date: 11/12/2021

Response Date: 11/30/2021

Question 09:
What variables does SCE use to identify improvement in the algorithm used to identify customers for post-enrollment verification?

Response to Question 09:

The PEV Disproportionate Stratified Random Sampling (DSRS) oversamples customers who have a greater propensity to fail eligibility verification based on their socioeconomic and demographic profile. More specifically, the DSRS oversamples customers who, first, reside in "high income" areas and/or, second, who have been enrolled in CARE for two years or less. Herein "high income" residential areas is operationally defined as service territories at the five digit ZIP code level where the proportion of households at or below the 200% of Federal Poverty Level income threshold is lower than the overall median proportion of households whose income is at the 200% FPL or less for the entire CARE population. In effect, these are areas which tend to have a relatively lower presence of CARE eligible households. Additionally, customers whose program tenure in CARE is two years or less have been established to fail eligibility verification at a significantly higher level than those who have been continuously enrolled in CARE for relatively longer periods of time. Given this focus of the DSRS schema, the CARE eligibility verification success rate in identifying customers who fail verification has been roughly 70% in recent years prior to the COVID-19 pandemic.

Southern California Edison

A.19-11-003 et al (A.19-11-004, A.19-04-005, A.19-04-006, and A.19-04-007) – PG&E Application for Approval of Energy Savings Assistance and California Alternate Rates for Energy Programs and Budgets for 2021-2026 Program Years.[CONSOLIDATION ALERT: A.19-11-003, A.19-11-004, A.19-11-005, A.19-11-006, A.19-11-007 are CONSOLIDATED]

DATA REQUEST SET Cal Advocates DR CARE-SCE-01

To: Cal Advocates
Prepared by: Anthony Abeyta
Job Title: CARE/FERA Program Advisor
Received Date: 11/12/2021

Response Date: 11/30/2021

Question 10:
What variables does SCE use to identify customers for post-enrollment income verification?

Response to Question 10:

SCE's Post-Enrollment Verification model uses the following variables:

PEV VARIABLES	CATEGORIES
Enrollment channel	Data exchange, categorical program, enrollment, recertification
Household size	1 to 2, 3 to 5, at least 6
Income	"High income" refers to areas where the proportion of households whose income is at 200% Federal Poverty Level or less is smaller than the overall median proportion of households meeting this threshold in the entire CARE population
Time on CARE rate	2 years or less in CARE, More than 2 years in CARE
Electric usage	Non-high usage, high-low usage (usage at 400% to <600% of baseline) & high-high usage (usage of at least 600% of baseline)

Southern California Edison

A.19-11-003 et al (A.19-11-004, A.19-04-005, A.19-04-006, and A.19-04-007) – PG&E Application for Approval of Energy Savings Assistance and California Alternate Rates for Energy Programs and Budgets for 2021-2026 Program Years.[CONSOLIDATION ALERT: A.19-11-003, A.19-11-004, A.19-11-005, A.19-11-006, A.19-11-007 are CONSOLIDATED]

DATA REQUEST SET Cal Advocates DR CARE-SCE-01

To: Cal Advocates
Prepared by: Anthony Abeyta
Job Title: CARE/FERA Program Advisor
Received Date: 11/12/2021

Response Date: 11/30/2021

Question 11:
Please provide the post-enrollment income verification algorithm, including any spreadsheets or code used to identify customers for post-enrollment income verification.

Response to Question 11:
Please see attached document titled, "CARE Verification Disproportionate Stratified Random Sampling Scheme."

Southern California Edison

A.19-11-003 et al (A.19-11-004, A.19-04-005, A.19-04-006, and A.19-04-007) – PG&E Application for Approval of Energy Savings Assistance and California Alternate Rates for Energy Programs and Budgets for 2021-2026 Program Years.[CONSOLIDATION ALERT: A.19-11-003, A.19-11-004, A.19-11-005, A.19-11-006, A.19-11-007 are CONSOLIDATED]

DATA REQUEST SET Cal Advocates DR CARE-SCE-01

To: Cal Advocates
Prepared by: Anthony Abeyta
Job Title: CARE/FERA Program Advisor
Received Date: 11/12/2021

Response Date: 11/30/2021

Question 12:
How many SCE customers will be subject to recertification over the next 12 months?

Response to Question 12:
SCE anticipates 740,441 CARE/FERA customers will be subject to recertification from December 1, 2021 through December 1, 2022. This number may be reduced as customers close their accounts through activities such as moving out of their homes.

Southern California Edison

A.19-11-003 et al (A.19-11-004, A.19-04-005, A.19-04-006, and A.19-04-007) – PG&E Application for Approval of Energy Savings Assistance and California Alternate Rates for Energy Programs and Budgets for 2021-2026 Program Years.[CONSOLIDATION ALERT: A.19-11-003, A.19-11-004, A.19-11-005, A.19-11-006, A.19-11-007 are CONSOLIDATED]

DATA REQUEST SET Cal Advocates DR CARE-SCE-01

To: Cal Advocates
Prepared by: Anthony Abeyta
Job Title: CARE/FERA Program Advisor
Received Date: 11/12/2021

Response Date: 11/30/2021

Question 13:
How many customers does SCE estimate will be subject to post-enrollment income verification in the next 12 months?

Response to Question 13:
SCE estimates that roughly 100,000 customers will be subject to post-enrollment income verification in the next 12 months.

Southern California Edison

A.19-11-003 et al (A.19-11-004, A.19-04-005, A.19-04-006, and A.19-04-007) – PG&E Application for Approval of Energy Savings Assistance and California Alternate Rates for Energy Programs and Budgets for 2021-2026 Program Years.[CONSOLIDATION ALERT: A.19-11-003, A.19-11-004, A.19-11-005, A.19-11-006, A.19-11-007 are CONSOLIDATED]

DATA REQUEST SET Cal Advocates DR CARE-SCE-01

To: Cal Advocates
Prepared by: Anthony Abeyta
Job Title: CARE/FERA Program Advisor
Received Date: 11/12/2021

Response Date: 11/30/2021

Question 14:
D.21-06-015 made changes to the threshold over which customers are selected for high usage verification. If fewer customers are identified for high-usage verification in a given

year, will SCE increase the number of customers subject to post-enrollment income verification?

Response to Question 14:
If fewer customers are identified for high-usage verification due to threshold changes from D.21-06-015, SCE will increase the number of model based verification to offset the reduction in high usage verification requests.

Southern California Edison

A.19-11-003 et al (A.19-11-004, A.19-04-005, A.19-04-006, and A.19-04-007) – PG&E Application for Approval of Energy Savings Assistance and California Alternate Rates for Energy Programs and Budgets for 2021-2026 Program Years.[CONSOLIDATION ALERT: A.19-11-003, A.19-11-004, A.19-11-005, A.19-11-006, A.19-11-007 are CONSOLIDATED]

DATA REQUEST SET Cal Advocates DR CARE-SCE-01

To: Cal Advocates
Prepared by: Anthony Abeyta
Job Title: CARE/FERA Program Advisor
Received Date: 11/12/2021

Response Date: 11/30/2021

Question 15:
Are customers removed from CARE due to non-response to PEV back-billed to recover the CARE discount?
. If so, what is the average amount back-billed?
. If those customers return to CARE, is the back-billed amount returned to those customers?

Response to Question 15:
SCE does not back bill customers who are removed from CARE due to non-response to PEV. These customers are removed from the CARE program effective on their current bill. If a customer returns to CARE at a later date, their discount is reinstated as of their current bill.

Southern California Edison

A.19-11-003 et al (A.19-11-004, A.19-04-005, A.19-04-006, and A.19-04-007) – PG&E Application for Approval of Energy Savings Assistance and California Alternate Rates for Energy Programs and Budgets for 2021-2026 Program Years.[CONSOLIDATION ALERT: A.19-11-003, A.19-11-004, A.19-11-005, A.19-11-006, A.19-11-007 are CONSOLIDATED]

DATA REQUEST SET Cal Advocates DR CARE-SCE-01

To: Cal Advocates
Prepared by: Anthony Abeyta
Job Title: CARE/FERA Program Advisor
Received Date: 11/12/2021

Response Date: 1/19/2022

Question 04-06 Revised:
4. Of the customers removed from CARE due to non-response to recertification in 2017 and 2018, how many entered arrears within 6 months? Within 1 year?
Please report each year separately and respond with the cumulative total in each time frame. For example, a customer who was removed from CARE in September of 2017, and returned 5 months later, should be counted in both the "6 months" and the "1 year" columns for 2017 (columns B and C), but not in columns D and E.
5. Same Q.4, but for customers removed due to non-response to PEV.
6. Same as Q.4, but for customers removed due to non-response to HU-PEV.

Response to Question 04-06 Revised:
Please see attached spreadsheet titled, “Cal Advocates DR-CARE-SCE-01 Qs 4-8 Updated” for answers to questions 4 through 6.

Southern California Edison

A.19-11-003 et al (A.19-11-004, A.19-04-005, A.19-04-006, and A.19-04-007) – PG&E Application for Approval of Energy Savings Assistance and California Alternate Rates for Energy Programs and Budgets for 2021-2026 Program Years.[CONSOLIDATION ALERT: A.19-11-003, A.19-11-004, A.19-11-005, A.19-11-006, A.19-11-007 are CONSOLIDATED]

DATA REQUEST SET Cal Advocates DR CARE-SCE-01

To: Cal Advocates
Prepared by: Anthony Abeyta
Job Title: CARE/FERA Program Advisor
Received Date: 11/12/2021

Response Date: 1/19/2022

Question 07 Revised:
For comparison, what percentage of non-CARE customers entered arrears in 2017-2019? Please exclude those who were removed from CARE through recertification, PEV, or HU-PEV within the 12 months preceding the arrearage.

Response to Question 07 Revised:
Please see attached spreadsheet titled, :Cal Advocates DR-CARE-SCE-01 Qs 4-8 Updated" for answers to question 7.

Qs 5-7. Of the customers who were removed from CARE through the following processes, how many entered arrears within the indicated timeframes? Please report each year separately and respond with the cumulative total in each time frame. For example, a customer who was removed from CARE in September of 2017, and returned 5 months later, should be counted in both the "6 months" and the "1 year" columns for 2017 (columns B and C), but not in columns D and E.

	2,017		2,018	
	6 months	1 year	6 months	1 year
4. Non-response to Recertification	60,801	74,496	69,372	80,794
5. Non-Response to Post-Enrollment Income Verification	17,527	22,157	23,336	28,102
6. Non-Response to High Usage Verification	28,970	35,059	36,422	42,180

ATTACHMENT 4:

Excerpt of SoCalGas's response to Cal Advocates' Data Request, DR-CARE-SCG-01

SOUTHERN CALIFORNIA GAS COMPANY
(DATA REQUEST CARE-SCG-01)

Requested: 11/15/2021
Qs 1,2, 9-13,15 Submitted: 12/1/2021

QUESTION 1:

How many SCG customers were removed from CARE due to non-response to recertification in 2017 and 2018? How many of those customers returned to CARE within 6 months? How many of those customers returned to CARE within 1 year? How many customers were removed from CARE due to non-response to recertification in total in 2017 and 2018?

Please report each year separately, and respond with the cumulative total in each time frame. For example, a customer who was removed from CARE in September of 2017, and returned 5 months later, should be counted in both the "6 months" and the "1 year" columns for 2017 (columns C and D), but not in columns E and F.

RESPONSE 1:

Please see the accompanied excel table *CalAdvocates_SCG_DR_12.1.21.xlsx.*

QUESTION 2:

Same as Q.1, but for non-response to PEV.

RESPONSE 2:

Please see the accompanied excel table *CalAdvocates_SCG_DR_12.1.21.xlsx.*

QUESTION 9:

What variables does SCG use to identify improvement in the algorithm used to identify customers for post-enrollment verification?

RESPONSE 9:

To identify improvement in the algorithm used to identify customers for post-enrollment verification (PEV), SoCalGas uses the common confusion matrix[1] to evaluate the model performance. For instance, comparing how predicted labels (high/low probability to be CARE-eligible) vs. actual outcomes (Approved, Terminated/De-enrolled). A series of metrics based on the confusion matrix are derived to quantify the model improvement. These metrics are listed as follows:

- ROC AUC score: Area under the Receiver Operating Characteristic Curve, it measures the overall performance of models at distinguishing positive and negative classes
- Accuracy: the ratio between the number of true predictions to the total number of predictions
- Precision: the ratio of true positive predictions to the total predicted positive observations
- Recall: the ratio of true positive predictions to the total number of positive observations
- F1 score: the weighted average of Precision and Recall

For all the metrics above, the higher score, the better model performance.

QUESTION 10:

What variables does SCG use to identify customers for post-enrollment income verification?

[1] A common confusion matrix is a method to measure the performance of a classification algorithm. A confusion matrix plots the amount of correct predictions against the amount of incorrect predictions.

RESPONSE 10:

SoCalGas uses the following variables to identify customers for PEV:

- Newly certified or re-certified CARE
- CARE appears on bill
- Fails CARE probability model threshold

The 21 variables SoCalGas uses in the CARE probability model to identify customers for PEV are previously described in CalAdvocates/CalPA data request response #1 Table A from July 2020. See excerpt of the variable table below.

CARE factor	Variable Description
bill_amt	Annual bill amount
hh_size	PRIZM average HH size
prizm _y1	PRIZM Life stage: young high income
prizm _y3	PRIZM Life stage: young low income
prizm _f4	PRIZM Life stage: family low income
prizm _m1	PRIZM Life stage: mature high income
prizm _m4	PRIZM Life stage: mature low income
inc_el	Income eligible enrollment
Auto_en	Automatic enrollment
de_enroll	Previously de-enrolled
enroll	No. of days in CARE
SF	Single family home
Fixed_Inc	fixed-income customer

Medi-Cal	Medi-Cal under 65 participant
LIHEAP	LIHEAP participant
WIC	WIC participant
food_stamp	Food Stamps participant
income	PRIZM HH Medium Income
Pprls	Paperless billing
ovd_ntc	no. of overdue notices in the last 12 months
pay_ext	no. of payment extension in the last 12 months

QUESTION 11:

Please provide the post-enrollment income verification algorithm, including any spreadsheets or code used to identify customers for post-enrollment income verification.

RESPONSE 11:

The following probability algorithm was developed by SoCalGas and is used to determine which CARE customers are most likely to qualify for the program.[2]

$$Logit\ (P) = a_0 + \sum_{i=1}^{n} a_i\ (CARE\ factor)_i$$

Where

P = probability of qualifying for CARE enrollment

n = number of factors in the model

The algorithm SoCalGas currently uses to determine the probability score is the logistic regression model. See below.

X =

0.306

– 0.00121 * bill_amt

[2] SoCalGas Advice Letter 4537, September 3, 2013, pg. 10.

+ 0.18979* hh_size
– 0.12758 * prizm _y1

+ 0.30540* prizm _y3
+ 0.04413* prizm _f4
– 0.08908 * prizm _m1
+ 0.14803* prizm _m4
-0.07511*inc_el

-0.37793*auto_en
+ 0.50616 *de_enroll
-0.02423*enroll
+0.35971*SF
+ 0.59544 Fixed_Inc
+ 0.40566* Medical
+ 0.07153* LIHEAP
-0.1536* WIC
+ 0.17717* food_stamp
– 0.0000* income

– 0.10504* pprls
-0.06388* ovd_ntc
+ 0.23685* pay_ext

P = exp(X)/(1+exp(X))

Customers are identified for post-enrollment income verification when the probability score is less than 0.5.

QUESTION 12:

How many SCG customers will be subject to recertification over the next 12 months?

RESPONSE 12:

Based on the current CARE status of approved or auto-recertification, and fixed income, approximately 720,003 customers will be subject to recertification over the next 12 months. A portion of these customers will pass the CARE probability model and be auto-recertified for an additional 2 years. Historically, SoCalGas has an annual recertification rate of 23% (2017-2019). Based on the historical rate, in 2022, approximately 426,260 of the current customers will be sent a recertification request.

- 12/2021 – 72,003
- 01/2022 – 77,094
- 02/2022 – 75,801
- 03/2022 – 109,462
- 04/2022 – 85,109
- 05/2022 – 72,799
- 06/2022 – 64,891
- 07/2022 – 33,898
- 08/2022 – 36,898
- 09/2022 – 33,987
- 10/2022 – 32,436
- 11/2022 – 25,625

QUESTION 13:

How many customers does SCG estimate will be subject to post-enrollment income verification in the next 12 months?

RESPONSE 13:

Per D. 12-08-044[3], SoCalGas estimates up to 7% of its CARE customers will be sent a PEV request in the next 12 months based on the historic verification rate. Pre-COVID, the average annual PEV rate for SoCalGas was 3.1%. Based on the pre-COVID PEV rate and October 2021's CARE participants, SoCalGas estimates 57,211 CARE customers may receive a PEV request in 2022.

QUESTION 15:

Are customers removed from CARE due to non-response to PEV back-billed to recover the CARE discount?

A) If so, what is the average amount back-billed?
B) If those customers return to CARE, is the back-billed amount returned to those customers?

RESPONSE 15:

Yes, SoCalGas customers removed from CARE due to non-response to PEV are back-billed to recover the CARE discount up to 3 months, to the date of the initial PEV request date.

A) In 2019, the average amount back-billed to the customer for the CARE discount received is $26.80. SoCalGas did not remove CARE customers due to non-response to PEV from March 2020 through October 2021 in compliance with the Emergency Disaster Relief COVID-19 customer pandemic protections and SoCalGas Advice Letter 5604-B. Since October 2021, the average back-billed amount is $21.04.

B) If those customers return to CARE, then the back-billed amount is not returned to those customers.

[3] D. 12-08-044 OP 122 states, *"The interim verification rate, for each of the IOUs, should apply to all enrolled CARE customers, including self-certified and categorically enrolled CARE customers. This interim verification rate shall not exceed 200% of the IOU's 2011 post enrollment verification rate."*

SOUTHERN CALIFORNIA GAS COMPANY

(DATA REQUEST CARE-SCG-01)

SOUTHERN CALIFORNIA GAS COMPANY
(DATA REQUEST CARE-SCG-01)

SOUTHERN CALIFORNIA GAS COMPANY (DATA REQUEST CARE-SCG-01)
Requested: 11/15/2021 Qs 4,5,7,8 Submitted: 12/9/2021

QUESTION 4:

Of the customers removed from CARE due to non-response to recertification in 2017 and 2018, how many entered arrears within 6 months? Within 1 year?

Please report each year separately and respond with the cumulative total in each time frame. For example, a customer who was removed from CARE in September of 2017, and returned 5 months later, should be counted in both the "6 months" and the "1 year" columns for 2017 (columns B and C), but not in columns D and E.

RESPONSE 4:

Please see the accompanied excel table CalAdvocates_SCG_DR_12.9.21.xlsx.

QUESTION 5:

Same Q.4, but for customers removed due to non-response to PEV.

RESPONSE 5:

Please see the accompanied excel table CalAdvocates_SCG_DR_12.9.21.xlsx.

QUESTION 7:

For comparison, what percentage of non-CARE customers entered arrears in 2017-2019? Please exclude those who were removed from CARE through recertification, PEV, or HU-PEV within the 12 months preceding the arrearage.

RESPONSE 7:

3.1% of non-CARE customers entered arrears in 2017-2019.

SOUTHERN CALIFORNIA GAS COMPANY

(DATA REQUEST CARE-SCG-01)

QUESTION 8:

What percentage of CARE customers entered arrears in 2017-2019?

RESPONSE 8:

2.33% percentage of CARE customers entered arrears in 2017-2019.

SOUTHERN CALIFORNIA GAS COMPANY

ENERGY SAVINGS ASSISTANCE AND CALIFORNIA ALTERNATE RATES FOR ENERGY PROGRAMS & BUDGETS FOR PROGRAM YEARS 2021-2026

(A.19-11-006)

(DATA REQUEST CALADVOCATES-ESA-CARE-KS6-SCG10)
RECEIVED: JUNE 22, 2020
SUBMITTED: JULY 6, 2020

QUESTION 1:
Please provide the CARE propensity or probability model used to determine which customers are most likely to be CARE eligible.

a. Include an explanation of the inputs used in the model.

RESPONSE 1:

The following probability model was developed by SoCalGas and is used to determine which CARE customers are most likely to qualify for the program.[1]

$$Logit\ (P) = a_0 + \sum_{i=1}^{n} a_i\ (CARE\ factor)_i$$

Where

P = probability of qualifying for CARE enrollment

n = number of factors in the model

Table A: CARE Factor definitions and default values

CARE factor	Variable Description	[redacted]	Definition	Explanation
Intercept	**Intercept**	[redacted]		Constant parameter
bill_amt	Annual bill amount	[redacted]	Non-sub-metered: if has 12 bills (current charge), annual bill = sum of revenue in the last 12 month; if has 6-11 bills, annual bill = average bill *12; if has less than 6 bills, annual bill = $437) Sub-metered: annual bill = sum of revenue in the last 12 month/ # of sub-metered Units	Sum of each customer's last 12 bill amounts; if some bills not available, impute from average amount
hh_size	PRIZM average HH size	[redacted]	see PRIZM HH Size table below	Each customer's average household size on zip code level
prizm _y1	PRIZM Life stage: young high income	[redacted]	If PRIZM_CD =(3,8,11,12,19,25,30, or 37) then set m4_y1=1, else set m4_y1=0	Binary variable, 1 if a customer fall into the category

[1] SoCalGas Advice Letter 4537, September 3, 2013, pg. 10.

				of young and high income, 0 if not
prizm _y3	PRIZM Life stage: young low income	[redacted]	If PRIZM_CD = (42,44,45,47,48,53, or 56) then set m4_y3=1, else set m4_y3=0	Binary variable, 1 if a customer fall into the category of young and low income, 0 if not
prizm _f4	PRIZM Life stage: family low income	[redacted]	if PRIZM_CD = (63,64,65, or 66) then set m4_f4=1, else set m4_f4=0	Binary variable, 1 if a customer fall into the category of family and low income, 0 if not
prizm _m1	PRIZM Life stage: nature high income	[redacted]	If PRIZM_CD = (1,7,9, or 10) then set m4 _m1=1, else set m4_m1=0	Binary variable, 1 if a customer fall into the category of family and low income, 0 if not
prizm _m4	PRIZM Life stage: mature low income	[redacted]	If PRIZM_CD = (55,57,58,59,60,61,or 62) then set m4 _m4=1, else set m4_me=0	Binary variable, 1 if a customer fall into the category of mature and low income, 0 if not
inc_el	Income eligible enrollment	[redacted]	if CARE_ELIG_PROOF_CD = 2 set m5a_inc_el=1, else set m5a_inc_el=0	Binary variable, 1 if a customer enrolled into CARE with income eligible, 0 if not
Auto_en	Automatic enrollment	[redacted]	if CARE_ELIG_PROOF_CD=0, set m5a_aut_en=1, else set m5a_aut_en=0	Binary variable, 1 if a customer enrolled into CARE automatically, 0 if not
de_enroll	Previously de-enrolled	[redacted]	if last CAA_DOC_STAT_CD = (DN, or TR), set m7a=1, else set m7a=0	Binary variable, 1 if a customer enrolled into CARE and was denied or terminated later, 0 if not
enroll	No. of days in CARE	[redacted]	no. of days from sp_st_dt	Number of days since a customer enrolled into CARE
SF	Single family home	[redacted]	If LC_CD = "A" then set LC_CD_A = 1;	Binary variable, 1 if a customer has single family home, 0 if not
Fixed_Inc	fixed-income customer	[redacted]	if FIX_INCM_SW = Y then set Fixed_Income_Flag=1, else set Fixed_Income_Flag=0	Binary variable, 1 if a customer enrolled in Fixed Income program, 0 if not
Medi-Cal	Medi-Cal under 65 participant	[redacted]	if MEDI_CAL_65UDR_SW=Y then set Medical_Under_65_fla=1, else set Medical_Under_65_fla=0	Binary variable, 1 if a customer enrolled in Medi-Cal program, 0 if not
LIHEAP	LIHEAP participant	[redacted]	if LIHEAP_SW=Y, set LIHEAP_Flag=1, else set LIHEAP_Flag=0	Binary variable, 1 if a customer enrolled in LIHEAP program, 0 if not
WIC	WIC participant	[redacted]	if WIC_SW = Y set WIC_Flag=1, else set WIC_Flag = 0	Binary variable, 1 if a customer enrolled in WIC program, 0 if not
food_stamp	Food Stamps participant	[redacted]	if FD_STP_SW= Y set Food_Stamp_Flag=1, else set Food_Stamp_Flag=0	Binary variable, 1 if a customer enrolled in Food Stamp program, 0 if not
income	PRIZM HH Medium Income	[redacted]	see PRIZM HH Medium Income below	Each customer's average income on zip code level
Pprls	Paperless billing	[redacted]	sub-metered: pprls=0 Non-sub-metered: ifOPT_SVC_CD='SCGPPRLS' set pprls =1, else set pprls=0	Binary variable, 1 if a customer enrolled in Paperless Billing program, 0 if not

ovd_ntc	no. of overdue notices in the last 12 months	[redacted]	sub-metered: ovd_ntc=0 Non-sub-metered: OVD_NTC = sum(OVD_NTC1 – OVD_NTC12)	Sum of each customer's overdue notices in the last 12 months
pay_ext	no. of payment extension in the last 12 months	[redacted]	sub-metered: pay_ext =0 non-sub-metered: PAY_EXT = sum(PAY_EXT1 – PAY_EXT12)	Sum of each customer's payment extension in the last 12 months

Note: highlighted items denote confidential data. Please refer to accompanying Confidentiality Declaration.

Table B: PRIZM household size and income

PRIZM CODE	HH Size MEAN	HH Income Medium
1	3.017442	121186
2	4.233994	126538
3	3.181583	109351
4	3.316663	91104
5	3.845598	107442
6	3.506249	112580
7	3.258647	93457
8	3.254674	78008
9	4.280284	87539
10	4.428492	82495
11	4.574298	88614
12	3.977837	77320
13	4.168733	88455
14	4.635516	75295
15	4.920462	76099
16	3.989096	57083
17	2.657085	80026
18	3.861808	76379
19	4.002522	72029
20	3.465735	78775
21	3.925475	55328
22	4.231793	51684
23	4.170522	60401
24	5.276403	53521
25	3.782954	75315
26	5.097756	59750

27	5.474698	54620
28	4.35725	58032
29	4.733172	58517
30	5.990176	53267
31	2.977989	37252
32	4.444871	59158
33	5.919199	58421
34	3.380757	55007
35	5.236184	41971
36	4.511244	53463
37	4.108851	56558
38	5.150752	45533
39	6.622612	51622
40	3.542527	43049
41	2.648727	41314
42	5.048051	45230
43	4.57803	45809
44	5.704987	32558
45	4.809569	45183
46	6.606547	32545
47	4.163905	25010
48	4.098076	33559
49	4.162618	36412
50	4.942451	44328
51	6.307423	44107
52	3.885142	35221
53	5.129458	30719
54	4.06261	36945
55	4.978147	33029
56	5.691691	33752
57	3.727221	32107
58	5.792408	33627
59	4.94421	26113
60	6.044912	25342
61	5.389144	29292
62	4.98186	28882
63	4.55228	31842

64	5.000512	28978
65	5.653622	33055
66	4.273632	25761
67	3.783143	44370(S)/36780(M)
68	6.906576	44370(S)/36780(M)

Note: PRIZM medium income, PRIZM household size, default values, and Probability Model coefficients may be updated annually.

SOUTHERN CALIFORNIA GAS COMPANY
ENERGY SAVINGS ASSISTANCE AND CALIFORNIA ALTERNATE RATES FOR ENERGY PROGRAMS & BUDGETS FOR PROGRAM YEARS 2021-2026
(A.19-11-006)
(DATA REQUEST CALADVOCATES-ESA-CARE-KS6-SCG10)
RECEIVED: JUNE 22, 2020
SUBMITTED: JULY 6, 2020

QUESTION 2:

Please describe in detail how the CARE propensity or probability model is incorporated into the CARE program (e.g., marketing and outreach strategy, recertification, post enrollment verification (PEV), high energy use recertification, income verification).

a. If the model is used to exempt certain households from recertification or PEV, please provide the total number of households exempted on an annual basis.

b. If the model modifies the recertification or PEV cycles for certain households, please provide the total number of households affected.

RESPONSE 2:

SoCalGas' probability model for CARE eligibility evaluation serves two purposes:

1) Customers who are scheduled for two-year recertification and have an 85% or better probability of being CARE-eligible, are exempted from two-year recertification once. These customers are granted *Soft CARE Recertification* in SoCalGas' Customer Information System (CIS), which means, they are granted a one-time exemption from being mailed a recertification application and automatically recertified for another two years.

2) Approximately one month, or one billing cycle after SoCalGas customers are enrolled or recertified on the CARE program, they are run through the model. CARE customers with a low CARE eligibility score of 30% or less are subject to verification and are mailed a PEV application.

The CARE Probability model is not used for marketing and outreach. High energy usage required income verification is not applicable to SoCalGas.

a. In 2019, 216,890 CARE customers were exempted from recertification once, and granted *Soft CARE Recertification* in 2019. In addition, 448,892 newly enrolled or recertified CARE customers received a CARE eligibility score of higher than 30% and were exempted from a PEV request in 2019.

b. SoCalGas CARE probability model does not have PEV cycles but does modify the recertification cycle for certain CARE households as stated above.

Additionally, but not related to the CARE probability model, CARE customers who indicate they are on a fixed income when they enroll are exempt from recertification for 1 cycle, and not required to recertify for 4 years.

SOUTHERN CALIFORNIA GAS COMPANY
ENERGY SAVINGS ASSISTANCE AND CALIFORNIA ALTERNATE RATES FOR ENERGY PROGRAMS & BUDGETS FOR PROGRAM YEARS 2021-2026
(A.19-11-006)
(DATA REQUEST CALADVOCATES-ESA-CARE-KS6-SCG10)
RECEIVED: JUNE 22, 2020
SUBMITTED: JULY 6, 2020

QUESTION 3:

Please provide data on CARE attrition due to non-response to recertifications and PEV. Include total CARE eligible customers, new annual enrollments, attrition, and attrition due to non-response for:

a. 2017-2020 CARE program cycle.

b. 2021-2026 CARE program cycle

RESPONSE 3:

SoCalGas objects to this request on the grounds that it calls for forecasted data that is speculative due to the uncertainty surrounding the COVID-19 pandemic and the resulting economic impact. Subject to and without waiving the foregoing objection, SoCalGas responds as follows.

Year	Total eligible customers	Total CARE Participants	New enrollments**	Total Attrition**	Attrition due to non-response**
2017	1,819,451	1,564,126	270,642	277,082	130,347
2018	1,793,870	1,615,527	311,911	260,510	144,530
2019	1,685,526	1,609,738	313,763	319,552	134,907
2020*+	1,705,389	1,620,120	317,461	235,739	33,142
2021*	1,719,976	1,633,977	320,176	324,364	136,938
2022*	1,734,946	1,648,199	322,963	327,187	138,130
2023*	1,750,137	1,662,630	325,790	330,052	139,340
2024*	1,765,398	1,677,128	328,631	332,930	140,555
2025*	1,780,639	1,691,607	331,468	335,804	141,768
2026*	1,795,844	1,706,052	334,299	338,671	142,979

*CARE participant forecast for 2020-2026 provided in SoCalGas 2021-2026 Low Income Application, Table B-4
**New enrollment, Total Attrition and Attrition due to non-response forecasts for 2020-2026 are calculated based on 2019 new enrollment and attrition values (as reported in SoCalGas 2019 Low Income Annual Report, CARE Table 2) which is the last complete year of data available.
+ No CARE customers removed due to non-response from March 4, 2020-April 16, 2021 due to COVID-19 Customer Protections enacted per Advice Letter 5604-B.

SOUTHERN CALIFORNIA GAS COMPANY
ENERGY SAVINGS ASSISTANCE AND CALIFORNIA ALTERNATE RATES FOR ENERGY PROGRAMS & BUDGETS FOR PROGRAM YEARS 2021-2026
(A.19-11-006)
(DATA REQUEST CALADVOCATES-ESA-CARE-KS6-SCG10)
RECEIVED: JUNE 22, 2020
SUBMITTED: JULY 6, 2020

QUESTION 4:

Please provide any plans for CARE outreach to newly unemployed customers impacted by COVID-19.

a. If SoCalGas has already conducted CARE outreach in response to the COVID-19 crisis, what actions has SoCalGas taken?

b. What are the results for the CARE outreach?

c. Was SoCalGas's outreach strategies effective? Why?

RESPONSE 4:

In April, SoCalGas began reaching out to newly unemployed customers about the CARE program. Below is a list of marketing and outreach efforts that SoCalGas has completed and plans to continue.

a. SoCalGas conducted the following in response to the COVID-19 crisis:
- Launched an advertising campaign in April 2020 called "SoCalGas CARES" on TV, radio, and social media in English, Spanish and multiple Asian languages (Chinese, Vietnamese and Korean). The campaign messaging incorporated the current challenges related to COVID-19, specifically addressing those who have recently been unemployed, to provide customers information on how to enroll online via the quick, easy-to-use application.
- Included a COVID-19 related message about CARE on outbound bill envelopes. The message stated, "If you're recently unemployed, you may be eligible to save 20% on your natural gas bill through our CARE program at socalgas.com/care".
- Sent emails and texts to customers communicating they may qualify for the CARE discount if there has been a change in income.
- Updated SoCalGas' CARE webpage to include "change in income" messaging informing recently unemployed customers they may now be eligible for CARE.
- Added CARE program information on SoCalGas' COVID-19 information page.

- Utilized CBOs to promote the CARE program. Across all counties, SoCalGas currently partners with 25 organizations. During the stay-at-home orders, the CBOs were not conducting in-person outreach, instead sending emails and distributing program literature via food distribution events.

b. Since the stay-at-home orders were enacted in late March, approximately 90,000 customers have enrolled onto the CARE program. There was a 16% enrollment increase in April, corresponding to the launch of SoCalGas' comprehensive CARE advertising campaign. The campaign also contributed to increased web visits as well as online enrollments. From March to April, online enrollments saw an 80% growth rate in that enrollment channel.

c. Yes, SoCalGas outreach strategies were effective at driving interest and increasing enrollments among newly eligible customers. Specifically, the advertising campaign helped reach the newly eligible masses through a mix of marketing and outreach channels, including traditional channels such as TV.

SOUTHERN CALIFORNIA GAS COMPANY
ENERGY SAVINGS ASSISTANCE AND CALIFORNIA ALTERNATE RATES FOR ENERGY PROGRAMS & BUDGETS FOR PROGRAM YEARS 2021-2026
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(DATA REQUEST CALADVOCATES-ESA-CARE-KS6-SCG10)
RECEIVED: JUNE 22, 2020
SUBMITTED: JULY 6, 2020

QUESTION 5:

If the CARE eligible population significantly increases, what changes to program costs does SoCalGas anticipate for:

a. ESA

b. CARE

RESPONSE 5:

a. SoCalGas has filed a budget application for the 2021-2026 program cycle that would allow for treatment of 110,000 customers per year. Although ESA/CARE eligible population changes, depending on their nature, could potentially impact the effectiveness of marketing approaches, SoCalGas would not necessarily foresee these changes driving overall cost changes in the delivery of the program as proposed. If SoCalGas were to propose, or the Commission were to order, that the ESA program increase activity in response to a larger population, incremental funding would need to be adopted by the Commission, depending on what needs were identified.

b. If the CARE eligible population significantly increases, SoCalGas would anticipate changes to program costs for CARE Processing, CARE PEV processing, Marketing and Outreach, as well as a possible increase in labor required to implement the additional activities.

QUESTION 6:

In light of shelter in place orders and other local or state requirements related to the COVID-19 pandemic, how does SoCalGas determine when to allow ESA contractors to perform work?

a. How does SoCalGas determine when to cease ESA contractor activity?

b. How does SoCalGas determine when to resume ESA contractor activity?

RESPONSE 6:

a. SoCalGas monitors and implements guidance from local, state and federal health and emergency response agencies, and relied on such guidance in determining to suspend ESA Program activity on March 18, 2020.

b. Similar to response a., SoCalGas determined the suspension should be lifted June 1, 2020 based on the guidance of local, state, and federal health and emergency response agencies, as well as the May 21, 2020 letter of CPUC Executive Director Alice Stebbins to Program Administrators (PAs) which stated, "Energy Efficiency and ESA PAs should be following the appropriate state or local health orders and not adopting any special approach for these programs that differentiates Energy Efficiency or ESA activities from other work in the area. In order to help ensure an orderly return to work, PAs should direct energy efficiency implementers and ESA contractors to follow state or local guidance on the allowance of construction projects and in-building renovations, whichever is more restrictive. The PAs do not need to suspend program activities in a manner that is more restrictive than what has been deemed necessary and safe by the health experts and agencies."[2]

[2] Letter from Executive Director Alice Stebbins: to Energy Efficiency Program Administrators - *Guidance on Energy Efficiency and Energy Savings Assistance Program Suspensions* dated May 21, 2020, p. 4.

SOUTHERN CALIFORNIA GAS COMPANY
ENERGY SAVINGS ASSISTANCE AND CALIFORNIA ALTERNATE RATES FOR ENERGY PROGRAMS & BUDGETS FOR PROGRAM YEARS 2021-2026
(A.19-11-006)
(DATA REQUEST CALADVOCATES-ESA-CARE-KS6-SCG10)
RECEIVED: JUNE 22, 2020
SUBMITTED: JULY 6, 2020

QUESTION 7:

How has the COVID-19-related suspension on ESA contractor activity impacted ESA program goals?

a. Please provide the current annual shortfall between actual installs and energy savings versus the estimated installs and energy savings.

RESPONSE 7:

The suspension from the COVID-19 pandemic has made achieving the annual goal very challenging due to the lack of ability to enter a customer's home for several months. SoCalGas' ESA Program goals for 2020 have not been adjusted as a result of the ESA Program suspension.

a. The following table illustrates the current annual shortfall between actual installs (households treated) and energy savings (therms) as reported in SoCalGas' May 2020 Low Income Monthly Report vs. estimated annual installs and energy savings.

Current Annual Shortfall Between Actual Installs & Energy Savings (through May 2020) vs. 2020 Annual Targets			
Category	**2020 Year End Target***	**Actual through May 2020**	**Shortfall through May 2020**
Households Treated	191,186	39,223	151,963
Therms Saved	6,530,000	215,713	6,314,287

*Annual households treated goals and therms saved targets approved in Disposition of Advice Letter 5325.

Qs 5-7. Of the customers who were removed from CARE through the following processes, how many entered arrears within the indicated timeframes? Please report each year separately and respond with the cumulative total in each time frame. For example, a customer who was removed from CARE in September of 2017, and returned 5 months later, should be counted in both the "6 months" and the "1 year" columns for 2017 (columns B and C), but not in columns D and E.

	2017		2018	
	6 months	1 year	6 months	1 year
4. Non-response to Recertification	42,823	52,218	44,835	55,492
5. Non-Response to Post-Enrollment Income Verification	3,287	4,168	2,295	11,110
6. Non-Response to High Usage Verification	N/A	N/A	N/A	N/A

Q2-4. How many customers removed from CARE due to non-response returned to the program within the indicated time frames? Please report each year separately, and respond with the cumulative total in each time frame. For example, a customer who was removed from CARE in September of 2017, and returned 5 months later, should be counted in both the "6 months" and the "1 year" columns for 2017 (columns C and D), but not in columns F and G.

	2017			2018		
	Total Removed in year	Returned within 6 months	Returned within 1 year	Total Removed in year	Returned within 6 months	Returned within 1 year
1. Non-Response to Recertification	130,347	33,312	40,884	144,530	34,177	41,729
2. Non-Response to Post-Enrollment Income Verification (PEV)	13,801	3,237	3,944	27,148	5,808	7,248
3. Non-Response to High Usage (HU) Verification*	n/a	n/a	n/a	n/a	n/a	n/a

* HU PEV applies to electric corporations so N/A for SoCalGas.

RESPONSE 10:

SoCalGas uses the following variables to identify customers for PEV:

- Newly certified or re-certified CARE
- CARE appears on bill
- Fails CARE probability model threshold

The 21 variables SoCalGas uses in the CARE probability model to identify customers for PEV are previously described in CalAdvocates/CalPA data request response #1 Table A from July 2020. See excerpt of the variable table below.

CARE factor	Variable Description
bill_amt	Annual bill amount
hh_size	PRIZM average HH size
prizm _y1	PRIZM Life stage: young high income
prizm _y3	PRIZM Life stage: young low income
prizm _f4	PRIZM Life stage: family low income
prizm _m1	PRIZM Life stage: mature high income
prizm _m4	PRIZM Life stage: mature low income
inc_el	Income eligible enrollment
Auto_en	Automatic enrollment
de_enroll	Previously de-enrolled
enroll	No. of days in CARE
SF	Single family home
Fixed_Inc	fixed-income customer

Medi-Cal	Medi-Cal under 65 participant
LIHEAP	LIHEAP participant
WIC	WIC participant
food_stamp	Food Stamps participant
income	PRIZM HH Medium Income
Pprls	Paperless billing
ovd_ntc	no. of overdue notices in the last 12 months
pay_ext	no. of payment extension in the last 12 months

QUESTION 11:

Please provide the post-enrollment income verification algorithm, including any spreadsheets or code used to identify customers for post-enrollment income verification.

RESPONSE 11:

The following probability algorithm was developed by SoCalGas and is used to determine which CARE customers are most likely to qualify for the program.[2]

$$Logit\ (P) = a_0 + \sum_{i=1}^{n} a_i\ (CARE\ factor)_i$$

Where

P = probability of qualifying for CARE enrollment

n = number of factors in the model

The algorithm SoCalGas currently uses to determine the probability score is the logistic regression model. See below.

X =

0.306

– 0.00121 * bill_amt

[2] SoCalGas Advice Letter 4537, September 3, 2013, pg. 10.

+ 0.18979* hh_size
– 0.12758 * prizm _y1

+ 0.30540* prizm _y3
+ 0.04413* prizm _f4
– 0.08908 * prizm _m1
+ 0.14803* prizm _m4
-0.07511*inc_el

-0.37793*auto_en
+ 0.50616 *de_enroll
-0.02423*enroll
+0.35971*SF
+ 0.59544 Fixed_Inc
+ 0.40566* Medical
+ 0.07153* LIHEAP
-0.1536* WIC
+ 0.17717* food_stamp
– 0.0000* income

– 0.10504* pprls
-0.06388* ovd_ntc
+ 0.23685* pay_ext

P = exp(X)/(1+exp(X))

Customers are identified for post-enrollment income verification when the probability score is less than 0.5.

ATTACHMENT 5:

Excerpt of SDG&E's response to Cal Advocates' Data Request, DR-CARE-SDGE-01

SDG&E Response to Public Advocates Office (Cal Advocates)
Data Request Dated November 9, 2021
Data Request No. Cal Advocates DR CARE-SDGE-01
Adam Buchholz: Public Advocates Office
Due Date: November 30, 2021

For questions 1-7, please use the attached spreadsheet "Cal Advocates DR-CARE-SDGE01.xlsx" to format responses.

1. How many SDGE customers were removed from CARE due to non-response to recertification in 2017 and 2018? How many of those customers returned to CARE within 6 months? How many of those customers returned to CARE within 1 year? How many customers were removed from CARE due to non-response to recertification in total in 2017 and 2018?
    - Please report each year separately, and respond with the cumulative total in each time frame. For example, a customer who was removed from CARE in September of 2017, and returned 5 months later, should be counted in both the "6 months" and the "1 year" columns for 2017 (columns C and D), but not in columns F and G.

SDG&E Response:

Please see attachment 'Attachment A' for response.

2. Same as Q.1, but for non-response to PEV.

SDG&E Response:

Please see attachment 'Attachment A' for response.

3. Same as Q.1, but for non-response HU-PEV.

SDG&E Response:

Please see attachment 'Attachment A' for response.

4. Of the customers removed from CARE due to non-response to recertification in 2017 and 2018, how many entered arrears within 6 months? Within 1 year?

    - Please report each year separately and respond with the cumulative total in each time frame. For example, a customer who was removed from CARE in September of 2017, and returned 5 months later, should be counted in both the "6 months" and the "1 year" columns for 2017 (columns B and C), but not in columns D and E.

SDG&E Response:

Please see attachment 'Attachment A' for response.

5. Same Q.4, but for customers removed due to non-response to PEV.

SDG&E Response:

Please see attachment 'Attachment A' for response.

6. Same as Q.4, but for customers removed due to non-response to HU-PEV.

SDG&E Response:

Please see attachment 'Attachment A' for response.

7. For comparison, what percentage of non-CARE customers entered arrears in 2017-2019? Please exclude those who were removed from CARE through recertification, PEV, or HU-PEV within the 12 months preceding the arrearage.

SDG&E Response:

Excluding customers who were removed from CARE through recertification/PEV/HU-PEV, 27% of non-CARE customers entered arrears in 2018 and 29% of non-CARE customers entered arrears in 2019. The percentage for 2017 cannot be provided because SDG&E only retains three years of credit data.

8. What percentage of CARE customers entered arrears in 2017-2019?

SDG&E Response:

In 2018, 42% of CARE customers entered arrears. In 2019, 48% of CARE customers entered arrears. The percentage for 2017 cannot be provided because SDG&E only retains three years of credit data.

Post-Enrollment Income Verification Algorithm

9. What variables does SDGE use to identify improvement in the algorithm used to identify customers for post-enrollment verification?

SDG&E Response:

SDG&E has not identified specific variables to identify improvements to the algorithm for post-enrollment verification.

SDG&E Response to Public Advocates Office (Cal Advocates)
Data Request Dated November 9, 2021
Data Request No. Cal Advocates DR CARE-SDGE-01
Adam Buchholz: Public Advocates Office
Due Date: November 30, 2021

10. What variables does SDGE use to identify customers for post-enrollment income verification?

SDG&E Response:

As ordered under D.12-08-044, SDG&E uses the following basic factors to identify customers for post-enrollment verification:

- Energy Use
- Annual Bill Amount
- Household Size
- PRIZM or Zip Codes
- Enrollment Method
- Previous Customer Ineligibility
- Previous CARE De-Enrollment
- Length of CARE Enrollment
- Length Since Previous PEV

Following Commission approval of Advice Letter 2515-E/2224-G in November 2013, SDG&E incorporated the following additional model factors for post-enrollment verification:

- Home Ownership
- Residence Type
- Neighborhood Characteristics
- CARE Program Characteristics

11. Please provide the post-enrollment income verification algorithm, including any spreadsheets or code used to identify customers for post-enrollment income verification.

SDG&E Response:

SDG&E's post-enrollment income verification algorithm and code used to identify customers for post-enrollment income verification can be read in SDG&E's Advice Letter 2515-E/2224-G located here, Link (https://tariff.sdge.com/tm2/pdf/2515-E.pdf).

Forecast and Other Policies

12. How many SDGE customers will be subject to recertification over the next 12 months?

SDG&E Response:

SDG&E objects to this request as vague and ambiguous as to the information requested. Subject to and without waiving the foregoing objection, SDG&E's response interprets "SDGE customers" as "SDG&E CARE customers."

SDG&E estimates 114,405 CARE customers will be subject to recertification in the next 12 months, beginning with December 2021.

13. How many customers does SDGE estimate will be subject to post-enrollment income verification in the next 12 months?

SDG&E Response:

Pursuant to D.12-08-044, SDG&E was directed to perform CARE post-enrollment verification annually for 3-6% of the CARE population. Using this information and current CARE enrollment, SDG&E estimates that a maximum of 19,827 customers may be subject to post-enrollment verification in the next 12 months, beginning with December 2021.

14. D.21-06-015 made changes to the threshold over which customers are selected for high usage verification. If fewer customers are identified for high-usage verification in a given year, will SDGE increase the number of customers subject to post-enrollment income verification?

SDG&E Response:

High usage verification is determined based on customer usage and does not affect the number of customers selected for standard post-enrollment verification.

15. Are customers removed from CARE due to non-response to PEV back-billed to recover the CARE discount?

- If so, what is the average amount back-billed?
- If those customers return to CARE, is the back-billed amount returned to those customers?

SDG&E Response:

SDG&E does not back-bill a customer removed from CARE due to non-response to PEV.

SDG&E Response to Public Advocates Office (Cal Advocates)
Data Request Dated November 9, 2021
Data Request No. Cal Advocates DR CARE-SDGE-01
Adam Buchholz: Public Advocates Office
Due Date: November 30, 2021

END OF REQUEST

STATE OF CALIFORNIA Edmund G. Brown Jr., *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

Advice Letters:
2515-E/2224-G
2515-E-A/2224-G-A

November 20, 2013

San Diego Gas and Electric
Attention: Megan Caulson
Regulatory Tariff Manager
8330 Century Park Court, Room 32C
San Diego, CA 92123-1548

SUBJECT: SAN DIEGO GAS & ELECTRIC COMPANY'S PROPOSED CALIFORNIA ALTERNATE RATES FOR ENERGY LONG TERM PROBABILITY MODEL

Dear Ms. Caulson:

Advice Letters 2515-E/2224-G and 2515-E-A/2224-G-A are effective as of October 3, 2013.

Sincerely,

Edward Randolph

Edward F. Randolph, Director
Energy Division

Clay Faber - Director
Regulatory Affairs
8330 Century Park Court
San Diego, CA 92123-1548

Tel: 858.654.3563
Fax: 858.654.1788
cfaber@semprautilities.com

September 3, 2013

ADVICE LETTER 2515-E/2224-G
(U902-G)

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

SUBJECT: SAN DIEGO GAS & ELECTRIC COMPANY'S (SDG&E) PROPOSED CALIFORNIA ALTERNATE RATES FOR ENERGY (CARE) LONG TERM PROBABILTY MODEL

PURPOSE

The purpose of this filing is to provide SDG&E's CARE long term model framework as directed in Decision (D.) 12-08-044, Ordering Paragraph (OP) 95. Per the aforementioned decision, the Investor Owned Utilities (IOUs) shall design a new long term probability model framework for use in the CARE post-enrollment verification process. The new long-term modeling framework is to be proposed through a Tier 2 advice letter that shall be filed with the Commission by September 1, 2013.[1] The model framework is to incorporate the basic factors required by the Decision including: an optimal Post Enrollment and Post Re-certification Income Verification rate tailored to SDG&E, to cost-effectively identify CARE Program enrollees who have the probability of being ineligible in the program, while tailoring the model to SDG&E's service territory that takes into account the basic probability factors, populations and administration costs.

BACKGROUND

On August 30, 2013, the Commission issued D.12-08-044, the final *Decision on Large Investor-Owned Utilities' 2012-2014 Energy Savings Assistance (ESA) and California Alternate Rates for Energy (CARE) Applications.* Ordering Paragraph (OP) 89 directed the IOUs to immediately begin the development of an interim targeted post enrollment and post re-certification income verification stratified probability model ("Interim Model") that incorporated basic factors as provided in the Decision, as well as any other territory specific factors, as appropriate.

OP 90 required the IOUs to implement the Interim Model within 60 days of the Decision and to closely track, monitor and review the data from the implementation of the Interim Model and incorporate lessons learned into the design of its long term probability model for review by the Energy Division (ED). In its long term probability model proposal each IOU must set forth justifications based on the lessons learned during the Interim Model implementation.

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[1] Because September 1 does not occur on a calendar business day, this Advice Letter is served timely on September 3, 2013.

SDG&E hired a consultant to review SDG&E's current model and develop and implement an interim model utilizing the requirements references above. The report, entitled Post-Enrollment Verification Model for the SDG&E California Alternate Rates for Energy Program (referenced herein as the "PEV Report") is attached.

Pre-Decision 12-08-044 Probability Model

SDG&E's initial probability model was developed in 1991 by Regional Economic Research, Inc. (RER). In 2005 and 2006, SDG&E worked with Itron, Inc. to review and update the initial PEV model. The PEV model was updated to include the following factors (2006 PEV Model):

- PRIZM Median Income = 66 PRIZM Codes with 66 corresponding incomes
- Maximum Summer Monthly kWh usage (April 30 – September 30)
- Single Family home Indicator of 1 = Yes or 0 = No
- Home Ownership Indicator of 1 = Yes or 0 = No

The weights associated with the indicators were:

Step One: $Logit(P) = 3.8313 - 0.0140 * PRIZM\ Median\ Income + 0.1428 * SF) - 0.0016 * MaxSumkWh - 1.3253 * HomeOwn$

Step Two: $$\frac{P = 2.718281828(LOGITP)}{1 + 2.718281828(LOGITP)}$$

Additional information regarding the pre-2006 PEV model can be found in Section 2 of the PEV Report.

SDG&E utilized the 2006 PEV Model from 2007 through October 2012. The resulting rates of verification and the corresponding removal rate are provided in the table below.

Program Year	Participants Requested to Verify	% of Population Total	Participants Dropped (Due to no response)	Participants Dropped (Verified as Ineligible)	Total Dropped	% Dropped through Random Verification
2007	4,589	2%	3,182	410	3,592	78%
2008	4,335	2%	2,794	481	3,275	76%
2009	5,639	2%	3,399	270	3,669	65%
2010	6,379	2%	2,350	302	2,652	42%
2011	9,243	3%	4,434	1,113	5,547	60%
2012[2]	7,862	3%	3,597	1,004	4,601	59%

Since the enrollment methods of customers requested to be verified, the number of customers that eventually re-enrolled in the program after being removed from the program; the non-

[2] Data from the 2006 PEV Model is through October 2012. The new verification rate was applied in November 2012.

response to PEV requests, and the corresponding subsidy savings from the development and use of the model were not required for reporting, SDG&E does not have these data available.

Cost associated with development of the initial model developed in 1991, which included the changes to the billing system to support the model, are not available. However, SDG&E did incur cost of approximately $40,000 to update the model in 2006. Information technology (IT) costs associated with the update were not tracked separately.

Interim PEV Model

D.12-08-044 (OP 89) required the development of an interim stratified probability model for PEV selection, incorporating the following basic factors:

- High Energy Use
- Annual Bill Amount
- Household Size
- PRIZM or Zip Codes
- Enrollment Method
- Previous Customer Ineligibility
- Previous CARE De-Enrollment
- Length of CARE Enrollment
- Length Since Previous PEV

SDG&E's consultant reviewed SDG&E's current model and developed and implemented an interim model utilizing the requirements references above. The initial interim model developed utilized a two-stage approach for verification. Factors included in the initial interim model are listed below:

Stage One:

- Usage
- Home Ownership
- Single family residence
- 200% of the poverty income threshold
- Average household size

Stage Two

- Enrollment Method
- Household Program History

In mid-2013, as results for the interim model became available, the consultant utilized the data received from the interim two-stage model to determine effectiveness and to update and revise the model. Given additional data and experience with the interim model, it was determined that a more effective and administratively more desirable one stage model could be developed. The proposed one-stage model includes:

Model Factors:

- Energy Use
- Home Ownership
- Residence Type
- Neighborhood Characteristics
- CARE program Characteristics

Details for both the interim models, including factor weights and lessons learned, are included in the attached detailed report beginning in Section 4 page 10.

Beginning in November 2012 through July 2013, 5,851 customers were sent PEV requests. As of mid-July, 1,265 customers were still within the 90 day response period. The remaining 4,586 customers had either responded or the 90 day response period had expired. Of the 4,586 customers, 1,571 (34%) were certified as eligible; 692 were certified as ineligible (15%); and 2,323 (51%) did not respond. There were 3,071 (67%) customers dropped from the program. Of the customers removed for non-response, 90 customers (approximately 1.5%) were re-enrolled in the program after submitting the required income documentation. Information based on enrollment type is listed in the table below.

Enrollment Method	Eligible	Ineligible	Removed Non-Response
Household	54%	64%	61%
Public Assistance	46%	36%	39%

Enrollment Type	PERCENT
Outreach Advisors	0.26%
DOOR TO DOOR	1.60%
Direct Mail	0.16%
Internet	28.59%
Late Renewal Application	7.00%
Outreach Strategies	1.69%
Phone Enrollment	26.44%
SDGE General Outreach	23.74%
SDG&E Customer Contact Center	7.55%
Third Party Contractor	2.51%
Third-Party Agency	0.46%
	100.00%

SDG&E incurred approximately $95,000 in costs associated with the interim probability model. These costs included the consultant cost to develop, analyze and update the model and IT cost to modify the CARE database to support the interim solutions.

Proposed Long Term Model

Based on the consultants' findings, SDG&E recommends adoption of the single stage model described above. However, SDG&E plans to continue to track and monitor the results from the model's implementation in order to continue to incorporate lessons learned. Additionally, the consultant recommends SDG&E pursue tracking mechanisms for households that move and establish service elsewhere, losing the link between the household and the application data from the previous account. SDG&E will explore this modification but is unable to determine when changes to the database will be completed. Detailed recommendations can be found in the Final PEV Report in Section 9, page 22.

High Use Verification Process

Another potential factor to the long term probability model is the implementation of the CARE High Usage Verification (HUV) process. SDG&E is currently in the process of implementing the HUV process and has begun with small samples of customers exceeding 600% of baseline. Eventually, SDG&E will verify 100% of those customers reaching 400% or 600% of baseline in any given month, as directed in Ordering Paragraph 101 of D. 12-08-044. While the process may not affect the PEV model factors, the characteristics of eligible households versus ineligible households may be more clearly defined and may cause some modifications to weights of the variables used in the PEV model.

Taking into account the high usage verification rate of 100%, SDG&E recommends setting its verification index threshold between 0.35 and 0.45. SDG&E then will continue to randomly select and verify customers at an annual rate not to exceed 6%, approved in D 12-08-044. This represents approximately 18,000 customers annually. This recommendation is based on the uncertainty the impacts the HUV process will have on the current model and subsequent customers falling within the set index. SDG&E may adjust this level downward if subsequent reviews by the utility and the consultant identify a lower level is sufficient when accompanied by the HUV process.

For a randomly selected group of customers SDG&E would expect that approximately 22% of the customers receiving a PEV request would be deemed income ineligible under the long term probability model. In addition to the income ineligible customers, there will be a subset of the randomly selected customers that will fail to respond. Therefore, the response rate is an important unknown variable in trying to predict the overall percentage of customers that will be deemed ineligible due to the PEV. In the absence of the new CARE HUV process, the expectation would be that the proportion of non-responders would mirror the historical average of non-responders. Let's assume that this value is 50%. Given that assumption, approximately one-half of customers subject to verification/re-certification will fail to respond (approximately 30% are verified and 20% are income ineligible). Since HUV requirements will likely identify (and ultimately eliminate) a large segment of non-responders, the proportion of non-responders to the PEV will likely diminish. As the non-response proportion is unknown, data derived from the implementation of the PEV modeling process will be closely tracked, monitored, and reviewed and lessons learned incorporated into any re-design of the PEV model. SDG&E may find that a lower verification rate will be suitable if the elimination of the high usage customers impact the index level threshold set on the probability model.

SDG&E estimates cost for implementation of the long-term probability model to be approximately $115,000 in IT costs, $45,000 in on-going data analysis, modeling updates/improvements and re-estimation, and approximately $ 117,000 in operations cost to maintain 6% verification rate.

EFFECTIVE DATE

SDG&E believes this filing is subject to Energy Division disposition and should be classified as Tier 2 (effective after staff approval) pursuant to GO 96-B. SDG&E respectfully requests that this filing be approved on October 3, 2013, 30 days from the date filed, with an effective date October 1, 2013.

PROTEST

Anyone may protest this Advice Letter to the California Public Utilities Commission. The protest must state the grounds upon which it is based, including such items as financial and service impact, and should be submitted expeditiously. The protest must be made in writing and must be received no later than September 23, 2013, which is 20 days of the date this Advice Letter was filed with the Commission. There is no restriction on who may file a protest. The address for mailing or delivering a protest to the Commission is:

CPUC Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102

Copies of the protest should also be sent via e-mail to the attention of the Energy Division at EDTariffUnit@cpuc.ca.gov. A copy of the protest should also be sent via both e-mail and facsimile to the addresses shown below on the same date it is mailed or delivered to the Commission.

Attn: Megan Caulson
Regulatory Tariff Manager
8330 Century Park Court, Room 32C
San Diego, CA 92123-1548
Facsimile No. (858) 654-1879
E-mail: MCaulson@semprautilities.com

NOTICE

A copy of this filing has been served on the utilities and interested parties shown on the attached list, including interested parties in A.11-05-020, by providing them a copy hereof either electronically or via the U.S. mail, properly stamped and addressed.

Address changes should be directed to SDG&E Tariffs by facsimile at (858) 654-1879 or by email to SDG&ETariffs@semprautilities.com.

CLAY FABER
Director – Regulatory Affairs

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY
ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No. **SAN DIEGO GAS & ELECTRIC (U 902)**

Utility type:
☒ ELC ☒ GAS
☐ PLC ☐ HEAT ☐ WATER

Contact Person: Christina Sondrini
Phone #: (858) 636-5736
E-mail: csondrini@semprautilities.com

EXPLANATION OF UTILITY TYPE
ELC = Electric GAS = Gas
PLC = Pipeline HEAT = Heat WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: 2515-E-A/2224-G-A

Subject of AL: Partial Supplemental - San Diego Gas & Electric Company's Proposed California Alternate Rates for Energy Long Term Probability Model

Keywords (choose from CPUC listing): Compliance

AL filing type: ☐ Monthly ☐ Quarterly ☐ Annual ☒ One-Time ☐ Other

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #:
D.12-08-044

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL N/A

Summarize differences between the AL and the prior withdrawn or rejected AL[1]: N/A

Does AL request confidential treatment? If so, provide explanation: N/A

Resolution Required? ☐ Yes ☒ No

Tier Designation: ☐ 1 ☒ 2 ☐ 3

Requested effective date: 11/20/13

No. of tariff sheets: 0

Estimated system annual revenue effect: (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: N/A

Service affected and changes proposed[1]: N/A

Pending advice letters that revise the same tariff sheets: N/A

Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Ave.,
San Francisco, CA 94102
EDTariffUnit@cpuc.ca.gov

San Diego Gas & Electric
Attention: Megan Caulson
8330 Century Park Ct, Room 32C
San Diego, CA 92123
mcaulson@semprautilities.com

[1] Discuss in AL if more space is needed.

General Order No. 96-B
ADVICE LETTER FILING MAILING LIST

cc: (w/enclosures)

Public Utilities Commission
DRA
S. Cauchois
R. Pocta
W. Scott
Energy Division
P. Clanon
S. Gallagher
D. Lafrenz
M. Salinas
CA. Energy Commission
F. DeLeon
R. Tavares
Alcantar & Kahl LLP
K. Cameron
American Energy Institute
C. King
APS Energy Services
J. Schenk
BP Energy Company
J. Zaiontz
Barkovich & Yap, Inc.
B. Barkovich
Bartle Wells Associates
R. Schmidt
Braun & Blaising, P.C.
S. Blaising
California Energy Markets
S. O'Donnell
C. Sweet
California Farm Bureau Federation
K. Mills
California Wind Energy
N. Rader
Children's Hospital & Health Center
T. Jacoby
City of Poway
R. Willcox
City of San Diego
J. Cervantes
G. Lonergan
M. Valerio
Commerce Energy Group
V. Gan
CP Kelco
A. Friedl
Davis Wright Tremaine, LLP
E. O'Neill
J. Pau
Dept. of General Services
H. Nanjo
M. Clark
Douglass & Liddell
D. Douglass
D. Liddell
G. Klatt
Duke Energy North America
M. Gillette
Dynegy, Inc.
J. Paul
Ellison Schneider & Harris LLP
E. Janssen
Energy Policy Initiatives Center (USD)
S. Anders
Energy Price Solutions
A. Scott
Energy Strategies, Inc.
K. Campbell
M. Scanlan
Goodin, MacBride, Squeri, Ritchie & Day
B. Cragg
J. Heather Patrick
J. Squeri
Goodrich Aerostructures Group
M. Harrington
Hanna and Morton LLP
N. Pedersen
Itsa-North America
L. Belew
J.B.S. Energy
J. Nahigian
Luce, Forward, Hamilton & Scripps LLP
J. Leslie
Manatt, Phelps & Phillips LLP
D. Huard
R. Keen
Matthew V. Brady & Associates
M. Brady
Modesto Irrigation District
C. Mayer
Morrison & Foerster LLP
P. Hanschen
MRW & Associates
D. Richardson
Pacific Gas & Electric Co.
J. Clark
M. Huffman
S. Lawrie
E. Lucha
Pacific Utility Audit, Inc.
E. Kelly
San Diego Regional Energy Office
S. Freedman
J. Porter
School Project for Utility Rate Reduction
M. Rochman
Shute, Mihaly & Weinberger LLP
O. Armi
Solar Turbines
F. Chiang
Southern California Edison Co.
M. Alexander
K. Cini
K. Gansecki
H. Romero
TransCanada
R. Hunter
D. White
TURN
M. Hawiger
UCAN
D. Kelly
U.S. Dept. of the Navy
K. Davoodi
N. Furuta
L. DeLacruz
Utility Specialists, Southwest, Inc.
D. Koser
Western Manufactured Housing
Communities Association
S. Dey
White & Case LLP
L. Cottle
Interested Parties In:
A.11-05-020

Post-Enrollment Verification Model for the SDG&E California Alternate Rates for Energy Program

Final Report

Eric Brunner
Mark McNulty
Mark Thayer

Prepared for
San Diego Gas & Electric
8306 Century Park Court
San Diego, CA 92123

August 27, 2013

CARE Post-Enrollment Verification Model

1. Background

San Diego Gas and Electric (SDG&E), as well as the other investor owned California electric and gas utilities, operates a California Alternate Rates for Energy (CARE) program. The CARE program provides a discount off energy bills for limited income customers. In order to be eligible for the program a customer's total household income before deductions (wages and salaries, interest or dividends, unemployment benefits, social security, etc.) must be at or below 200% of the federal poverty level, which is based on the number of persons in the household. The specific guidelines for the study period (2012-2013) are provided in Table 1 below.

Table 1
CARE Program Qualification Thresholds

Household Size	Maximum Combined Annual Income
1	$22,340
2	$30,260
3	$38,180
4	$46,100
5	$54,020
6	$61,940
7	$69,860
8	$77,780
9	$85,600
10	$93,520

Customers may satisfy the income requirements in one of following two ways: (1) the Categorical Eligibility and Enrollment process allows customers to enroll in the CARE Program through an expedited process if the applicant is enrolled in one of several approved low income programs that has already verified the applicant's income; or (2) the self-certification process allows the CARE applicants to enroll by attesting to their income eligibility. In both instances, income verification occurs after enrollment and that verification process is labeled Post Enrollment Verification. In addition, enrollees must self-recertify their continued program eligibility to renew their enrollment at mandated intervals and the renewed enrollees may be subject to post re-certification income verification (referred to as Post Re-certification Income Verification).

CARE Post-Enrollment Verification Model

The primary issue with both the categorical enrollment and self-certification processes is that CARE subsidies may be diverted from legitimate CARE eligible customers and ratepayers to potentially ineligible households. This could occur either because programs on the Categorical Eligibility and Enrollment Program have eligibility requirements that do not align with the CARE eligibility requirements (in terms of what counts as income to qualify or if the income of all people residing in the residence is used to determine income eligibility) or individuals may misrepresent their income. There are several potential solutions for overcoming this difficulty and ensuring that CARE subsidies are received by legitimately eligible customers. For example, SDG&E could income verify 100% of the CARE applicants. This approach would insure conformance with the program guidelines but could be prohibitively expensive and possibly discourage eligible customers from applying. Alternatively, SDG&E could employ a probabilistic model that would identify those CARE enrollees that are most likely to be ineligible for CARE benefits and subject them to verification. This stratified probability modeling and sampling, wherein the strata are defined by member's shared attributes, can yield similar results to the 100% verification rate but at significantly lower cost. In fact, in Decision 12-08-044 the California Public Utilities Commission (CPUC) has mandated that the investor owned utilities begin immediate development of a targeted Post Enrollment Verification and Post Re-certification Income Verification probability model by incorporating the following basic factors (CPUC, 2012):

- Indicators of high energy use
- Annual bill amounts
- Household size
- Location indicator such as PRIZM or ZIP code
- CARE Enrollment method (e.g. categorical or self-certify)
- Previously indicated customer ineligibility for the CARE program
- Customers previously de-enrolled from the CARE Program
- Length of CARE Program Enrollment
- Length of time lapse since previous income verification

This report is in response to the CPUC directive. Specifically, in the following sections we: (1) provide a review of previous post enrollment verification (PEV) probability models used by SDG&E; (2) describe our empirical strategy for addressing both data limitations and the constraints imposed by the CPUC directive; (3) describe and summarize data used in the probability model estimation; (4) provide the model estimation and verification results (summary statistics, regressions, robustness tests); (5) and offer final recommendations.

2. Previous SDG&E Post Enrollment Verification Models

The original SDG&E PEV Model was developed in 1991 by Regional Economic Research to identify likely ineligible households for the Low Income Rate Assistance (LIRA) program, the precursor to the CARE program. The regression model utilized data from the MIRACLE X home energy survey, the 1980 census, and the SDG&E master file. In the model's final form the household's probability of qualifying for LIRA (based on self-reported income and household size from the MIRACLE X home energy survey) was dependent on home ownership, electricity usage, and the socioeconomic character of the household's neighborhood as measured by the percentage of households that qualified for LIRA.

The PEV model was updated in 2001, 2006, and 2012. The 2001 update included two minor changes: (1) the neighborhood was characterized using a MicroVision code developed by Claritas rather than the percent that qualify for LIRA, which was based on the 1980 census; and (2) the regression specification included an additional explanatory variable, the number of years the household had been in residence. The resulting model performed quite similarly to the original, although the estimated regression coefficients showed substantial changes compared to the original.

The next iteration of the SDG&E PEV model was completed in 2006 by Itron, Inc. This update used data from the Residential Appliance Saturation Study (RASS 2006). Household CARE qualification was determined by survey self-reported income and household size, thereby minimizing the potential problem associated with misrepresented income data. The RASS data

were combined with energy usage information from the SDG&E master file and characteristics of the household's neighborhood, which was obtained from Athens Research. CARE eligibility was dependent on electricity usage, home ownership, type of household (single or multi-family), and the median income or percent of households below 200 percent of the poverty level in the surrounding neighborhood. The update also included a failed attempt to use CARE program data only – the modeling could not differentiate between real non-eligible households and households that did not provide income data (this issue is discussed in greater detail below).

The 2006 update was used in the following manner. Periodically, a group of CARE participants were selected using a random sampling approach. The characteristics of these randomly selected households were combined with the coefficients of the estimated PEV model to create a predicted probability of being CARE eligible for each household. Households that have predicted probabilities above some threshold were deemed to be eligible and were allowed to remain on the CARE program until their next evaluation (i.e., these households are essentially verified or re-certified by the PEV). Households with low predicted probabilities were subject to the post-enrollment verification and/or recertification process. If a household provided the necessary documentation to a verification inquiry and satisfied the CARE program guidelines (see Table 1 above) then it was declared verified/re-certified and remained on CARE. Households that failed to respond (the vast majority of subsequent non-qualifiers) or did not meet program guidelines were removed from CARE.

All available evidence, including model validation and the historical record, suggests that the previous PEV models performed as expected in that SDG&E was able to target post enrollment verification and re-certification toward households that were more likely to be non-qualifiers for the CARE program, resulting in administrative cost savings. However, the 2006 version of the PEV did not satisfy the directive from the CPUC because it did not include many of the variables (e.g., CARE enrollment method, previous ineligibility, previous de-enrollment, length of enrollment, income verification history, etc.) mandated for the next generation probability model. Furthermore, the PEV model developed by Itron, Inc. (2006) relied on survey responses from the 2003 RASS survey and neighborhood demographics from the 2000 census, which may no longer accurately reflect the demographic composition of neighborhoods. Since the

development of the 2006 PEV model, more recent data such as 2009 RASS survey data, the 2006-2010 American Community Survey data, and the 2010 US census data have become available, enabling the development of a revised model.

The RASS 2009 version has the requisite data to enable households to be identified as qualifying for CARE and not qualifying for CARE because the survey includes both household income and household size information. The self-reported income and household size data in the RASS survey may be measured with error but there is no expectation of any systematic bias since there is no explicit reward for misrepresentation as would be the case if one used CARE application information related to these variables. This is the reasoning behind the use of RASS data in the 2012 version of the PEV model.

However, the CPUC directive, which is focused on the identification of illegitimate CARE participants, produces a fundamental dilemma since the RASS survey does not allow the direct observation of income misrepresentation– rather one observes whether or not the household would qualify for CARE. That is, the explanatory variables for CARE qualification helps to explain eligibility, not misrepresentation of income. Obvious candidates for independent variables that explain CARE eligibility are both individual-level (energy usage, home ownership, type of home, etc.) and group-level (income or education level in surrounding neighborhood). These variables are specified in the CPUC directive. But the CPUC list also includes variables that help to explain deliberate misrepresentation of income (enrollment via self-certification v. categorical, time on the CARE program, previous de-enrollment, etc.) that are inappropriate for explaining CARE qualification. Therefore, the 2012 update developed by Brunner, et al employed an empirical strategy different from that used in previous PEV modeling. In addition, the update was designed to both meet the CPUC guidelines and to include more recent data.

CARE Post-Enrollment Verification Model

The 2012 update used a two-phase estimation procedure. First, the RASS qualification data, combined with individual-level and group-level information was used to estimate an updated PEV model similar in structure to the previous editions. This first stage model took the following form:

$$Probability(Qualify) = Logit(P)$$
$$= f(energy\ use, home\ ownership, residence\ type, neighborhood\ characteristics)$$

where *Qualify* is a binary variable representing the household's CARE qualification status based on RASS survey information of income and household size (see Table 1). The dependent variable, *Probability(Qualify)*, was transformed using the logistic transformation. The individual-level variables *home ownership* and *residence type* were from the RASS survey whereas *energy use* was derived from the SDG&E Customer Master File and merged with the RASS data. Maximum Summer kWh was selected as the preferred measure of energy use but alternative measures such as annual energy use or use above some explicit threshold produced similar results. The neighborhood characteristics were selected from the 2006-2010 American Community Survey and the 2010 US Census. A variety of neighborhood characteristics were used to test the sensitivity of the estimates. Note that at this stage that variables designed to explain deliberate misrepresentation of income were not included.

The estimated model, combined with the characteristics of the CARE program participants, was used to generate a predicted probability of qualifying for each CARE household. Specifically, each CARE participant's attributes were substituted into the estimated equation, multiplied by the estimated coefficients, and converted into a predicted probability. The final part of the calculation took the following form:

$$Predicted\ Probability(Qualify) = \frac{e^{Logit(p)}}{1 + e^{Logit(p)}}$$

These estimated probabilities ranged in value from zero to one and represented the likelihood that each household was CARE eligible. For example, consider a household that had the following attributes: (1) maximum summer electricity usage = 400 kWh; (2) residence = multi-

family building; (3) home = not owned by occupant; and (4) neighborhood mean income = $50,000. The predicted probability for this household was 53.5%. Note that the average probability of qualifying for the CARE program is approximately 20.7%. So this example household very likely qualified for CARE. Alternatively, a household at the other end of the spectrum characterized by: (1) maximum summer electricity usage = 800 kWh; (2) residence = single family; (3) home = owned by occupant; and (4) neighborhood mean income = $90,000 had a predicted probability of 11.5%. In effect, households deemed unlikely to be CARE eligible would be natural targets for post-enrollment verification. In other words, these probabilities represent the likelihood that an individual household is misrepresenting their income and taking advantage of the system.

Given these indirect measures of income misrepresentation, the second step was to regress these estimated probabilities against the remainder of the CPUC variable list – the variables that relate directly to the probability of income misrepresentation (CARE enrollment method, previous ineligibility, previous de-enrollment, length of enrollment, and income verification history). This secondary regression yielded estimates of the magnitude and significance of variables commonly thought to be of importance in describing potential illegitimate behavior and took the following form:

$$Predicted\ Probability(Qualify) = f(enrollment\ method, household\ program\ history).$$

The second stage modeling was a departure from previous versions of the PEV model and was necessitated because the CPUC mandated that variables of interest which were potential indicators of income misrepresentation rather than CARE qualification (the subject of stage one modeling), be included in the analysis. The empirical results indicated that the CPUC was correct in its anticipation that these historical measures would be significant indicators of CARE eligibility. These results had important implications for implementation of a post-enrollment verification model.

Implementation of the model proceeded as follows.

- A random sample of CARE participants for possible income verification was selected.

- The predicted probability of CARE eligibility was calculated for each of the households in the random sample using the first stage probability model.
- Households with predicted probabilities below some threshold were subject to verification process.
- Households with predicted probabilities above the threshold, those that would have been automatically verified in the previous version of the process, were then subject to a second evaluation using the second stage model.

Evidence collected over the period November 2012 – July 2013 suggested that the two stage process was operating effectively and that households with a greater likelihood of being ineligible were being identified and culled from the system. However, the two stage approach had some specific problems. First, the approach relied on an external survey (RASS 2009) wherein CARE qualification was based on self-reported income and household size, which may be subject to both bias and possible misrepresentation. Obviously, verified income and household size constitute the preferable alternative. Second, the CPUC mandated variables directed at income misrepresentation could only be included in a round-about manner which obscures their relative importance to the explanation of CARE eligibility. Third, the two stage process caused an undue increase in administrative burden. Therefore, we re-examined the quality/quantity of internal SDG&E data to see if the development of a one stage model was possible. This is the subject of the remainder of the report.

3. Post Enrollment Verification Model Update – Data Issues

The implementation of the empirical strategy specified below requires a source of data that includes both CARE eligible and CARE non-eligible households. That is, in order to accurately identify households that are most likely to be misrepresenting their income one needs information on both legitimate and illegitimate CARE participants and their corresponding attributes. One data option is to use only CARE program data (internal to SDG&E). This data set includes all *verified* customer characteristics (e.g., income, household size, home ownership, enrollment history, etc.) as well as a determination of eligibility/ineligibility corresponding to the verification and/or re-certification process.

Itron, Inc. demonstrated in its 2006 report that this source of data (CARE program only) was not a viable alternative because: (1) the sample size of households that failed to satisfy the income requirements was too small; and (2) the vast majority of households deemed ineligible were due to non-response, a group that could include both qualifying and non-qualifying households. This second issue was especially problematic because households that failed to meet income requirements could not be separated from those households that failed to provide income documentation in response to an attempt at verification and/or re-certification, thereby confusing any attempt at empirical estimation.

However, this data source has improved dramatically over the intervening years in that codes were added to identify the specific reasons why individual households were deemed ineligible (e.g., failed to respond, exceeded income limit, etc.) and the relevant sample sizes have increased to allow efficient estimation. Thus, we decided to utilize this source of data and develop a one stage model. Note that a primary advantage of this data is that all household characteristics, especially income, are verified (not self-reported) through the verification process.

4. Post Enrollment Verification Model Update – Empirical Strategy

Estimation of the PEV using only CARE program data allows us to combine the two stage model discussed above into a one stage model that incorporates individual level, group level, and CARE program specific variables in an attempt to explain being eligible or ineligible for CARE. The model takes the following form:

$$Probability\ (Eligible) = Logit\ P = f(energy\ use, home\ ownership, residence\ ty\ pe, neighborhood\ characteristics, CARE\ program\ characteristics)$$

where *Eligible* is a binary variable representing the households CARE eligibility status based on the verification process and all individual level independent variables, with the exception of energy use, are taken from the CARE program data base. The variable *energy use* is measured as Maximum Summer Usage and was derived from the SDG&E Customer Master File and merged

with the CARE program data. The neighborhood variables either conform to census neighborhoods or PRIZM areas. The dependent variable, *Probability(Eligible)*, was transformed using the logistic transformation.

The probability that a household is eligible for the CARE program is determined by substituting CARE participant's attributes into the estimated equation, multiplying by the estimated coefficients, and calculating

$$Predicted\ Probability(Qualify) = \frac{e^{Logit(p)}}{1 + e^{Logit(p)}}$$

These estimated probabilities range in value from zero to one and represent the likelihood that each household is CARE eligible.

5. Post Enrollment Verification Model Update – Data Specifics

The CARE program data base contains information on approximately 1.4 million accounts. However, approximately three quarters of these accounts are inactive. In addition, some accounts are missing important information such as home ownership or eligibility status and some accounts do not have currently available energy usage. Eliminating these observations and accounting for other data discrepancies yields 33,766 usable data points (see Table 2 below for the complete attrition analysis).

Table 2
Sample Attrition Analysis

Sample	Customer Count
Original SDG&E CARE Master File Sample	1,374,016
Less Inactive Accounts	355,630
Less Missing Energy Usage Data	319,902
Less Missing Home Ownership Data	308,412
Less final CARE Status is NOT Certified or Ineligible	43,805
Less final CARE Status is NOT Certified or Ineligible due to Income Exceeds Program Limit	33,799

As indicated above, the dependent variable in the analysis is the household's final CARE eligibility status, of which there are two possibilities: (1) the household meets the income threshold and is declared "eligible" after verification; or (2) the household fails to satisfy the income threshold and is declared "ineligible." Note that the ineligible group does not include households that fail to respond to verification or were deemed ineligible due to some non-income reason.

To explain eligibility we constructed a number of individual- and neighborhood-level variables to implement the empirical strategy outlined above (see Table 3 for full definitions). Those variables are: (1) home ownership from the CARE program data base; (2) energy use from the SDG&E Customer Master file; (3) median household income in the neighborhood as defined by PRIZM location; and (4) the fraction of the households in the neighborhood that have incomes at or below 200% of the poverty level, the fraction of the neighborhood that has a high school diploma or less education, and the mean household income, the median gross rent, and the average household size in the neighborhood. Note that for these census variables neighborhood refers to either 2010 block groups, or census tracts depending on the variable definition (see Table 3). Based on the geographical boundaries of the 2010 census, the SDG&E service territory has 1,996 block groups, and 698 census tracts. The data are merged by premise identification location for each CARE program participant. The merging exercise produced an important by-product of our research. Specifically, we geocoded all premise IDs in the SDG&E service territory, allowing accurate assignment of the premise IDs to each census designation.

Summary statistics for the dependent variable and the set of explanatory variables, subdivided by CARE eligibility status, are provided in Table 4. The mean of each variable is presented for each sub-group, with the corresponding standard deviations in parentheses. As is illustrated, approximately 22.0% of the 33,799 households in the CARE program data set are ineligible for the CARE program based on verified income and household size. A brief inspection of the summary statistics reported in Table 4 reveals that households whose income exceeded the CARE Program limit and were therefore found to be ineligible for the program tend to be: 1) significantly more likely to be homeowners: 2) have higher energy use: 3) live in higher income neighborhoods: and 4) live in neighborhoods with more highly educated households. In addition, households that self-certified income on the original application and signed up via the internet are more likely ineligible. Also note that data on how the application was received is missing for 9,250 customers (8,195 CARE eligible customers and 1,055 CARE non-eligible customers).

CARE Post-Enrollment Verification Model

Table 3
Variable Definitions for the Post-Enrollment Verification Model

Variable	Source	Definition	Unit of Measurement
Eligible	SDG&E	= 1 if CARE Eligible, = 0 if CARE non-Eligible	Individual
Homeowner	SDG&E	= 1 if Homeowner, = 0 otherwise	Individual
Maximum Summer KWH	SDG&E	Maximum Summer KWH (100s)	Individual
Signed Up Via Household Income Option	SDG&E CARE Application	= 1 if enrolled based on income, = 0 if categorical	Individual
Door to Door	SDG&E CARE Application	= 1 if received application by Advisor or Door to Door, = 0 otherwise	Individual
Direct Mail	SDG&E CARE Application	= 1 if received application by Direct Mail, = 0 otherwise	Individual
Internet	SDG&E CARE Application	= 1 if received application by Internet, = 0 otherwise	Individual
Late Renewal Application	SDG&E CARE Application	= 1 if received application by Late Application, = 0 otherwise	Individual
Outreach Strategies	SDG&E CARE Application	= 1 if received application by Outreach Strategies, = 0 otherwise	Individual
Telephone	SDG&E CARE Application	= 1 if received application by Telephone, = 0 otherwise	Individual
System = SDG&E Customer Call Center Request	SDG&E CARE Application	= 1 if received application by System, = 0 otherwise	Individual
Third Party	SDG&E CARE Application	= 1 if received application by Third Party Contractor or Agency, = 0 otherwise	Individual
Unlinked Application	SDG&E CARE Application	= 1 if application data is missing, = 0 otherwise	Individual
PRIZM Median Household Income	Nielsen	Mean Household Income	PRIZM Area
Fraction Below 200% of Poverty Threshold	2010 ACS	Fraction of Population at or Below 200% of Poverty Line	Census Block Group
Median Household Income	2010 ACS	Median Household Income ($10,000s)	Census Block Group
Median Gross Rent	2010 ACS	Median Gross Rent of Rental Units	Census Tract
Fraction High School Diploma or Less	2010 ACS	Fraction of Population Age 25 or Older with a High School Degree or Less	Census Block Group
Average Household Size	2010 ACS	Average Number of Residents per Household	Census Block Group

CARE Post-Enrollment Verification Model

Table 4
Summary Statistics for Post Enrollment Verification Model

Variable	CARE Eligible	Care Non-Eligible
Number of Households	26,359	7,440
Homeowner	0.300	0.692
	(0.458)	(0.461)
Maximum Summer KWH	541	710
	(414)	(539)
Self-certify Household Income Option	0.485	0.883
	(0.499)	(0.321)
Signed Up Via Door to Door	0.040	0.013
	(0.196)	(0.113)
Signed Up Via Direct Mail	0.003	0.007
	(0.051)	(0.081)
Signed Up Via Internet	0.146	0.424
	(0.353)	(0.494)
Signed Up Via Late Renewal Application	0.037	0.023
	(0.188)	(0.150)
Signed Up Via Outreach Strategies	0.031	0.006
	(0.174)	(0.079)
Signed Up Via Telephone	0.184	0.252
	(0.387)	(0.434)
Signed Up Via SDG&E Customer Call Center Request	0.232	0.050
	(0.422)	(0.218)
Signed Up Via Third Party	0.081	0.009
	(0.272)	(0.095)
PRIZM Median Household Income	50,226	64,668
	(21,956)	(23,397)
Median Household Income	57,760	72,035
	(26,682)	(29,351)
Fraction Below 200% Poverty Threshold	0.366	0.251
	(0.214)	(0.168)
Median Gross Rent	1,258	1,433
	(374)	(397)
Fraction High School Diploma or Less	0.430	0.322
	(0.209)	(0.172)
Average Household Size	2.882	2.747
	(0.725)	(0.661)

6. Post Enrollment Verification Model Update – Regression Results

The estimated logistic regression results for the empirical model are presented in Table 5. The dependent variable is a binary variable that takes a value of one if the household is eligible for CARE and zero if the household is ineligible because it exceeds the income limit. Coefficient significance is indicated by the following code: * significant at the 10% level; ** significant at the 5% level; and *** significant at the 1% level. Standard errors are in brackets beneath the estimated coefficients. Also note the number of observations vary slightly across specifications due to missing census data.

Three specifications are presented in Table 5. The preferred model is Model 1, which uses the PRIZM income as the sole neighborhood indicator. This model has the highest likelihood ratio test which is a test of the hypothesis that all the coefficients are jointly equal to zero. A higher likelihood ratio test statistic indicates a greater rejection of the null that the coefficients are jointly equal to zero. A negative (positive) coefficient means the household is less (more) likely to be eligible.

All of the model specifications include twelve individual-level explanatory variables (*Maximum Summer kWh Usage*, *Home Ownership*, various CARE program enrollment possibilities, and an indicator if the CARE account application was missing), and a varying set of group-level neighborhood attributes. The variability in the neighborhood attributes produces the three specifications shown in Table 5. In all specifications the individual-level variables *Summer kWh Usage* and *Home Ownership* are significantly different from zero and have the expected relationship to the dependent variable. Specifically, households that are characterized by home ownership and relatively high energy usage are more likely to be ineligible. Similarly, all neighborhood variables perform as expected in both significance and relationship to the dependent variable. Thus, households located in neighborhoods with smaller family sizes, smaller concentrations of less educated households, higher concentrations of high income households and higher housing costs are less likely to qualify for the CARE program.

CARE Post-Enrollment Verification Model

Table 5
Post-Enrollment Verification Models
Dependent Variable = Binary Indicator for CARE Eligibility

Variable	(1)	(2)	(3)
Homeowner	-1.461***	-1.505***	-1.528***
	[0.035]	[0.035]	[0.036]
Maximum Summer KWH	-0.029***	-0.034***	-0.039***
	[0.003]	[0.003]	[0.004]
Self-certify Household Income Option	-2.186***	-2.163***	-2.146***
	[0.047]	[0.047]	[0.048]
Signed Up Via Door to Door	-0.006	-0.026	-0.102
	[0.131]	[0.131]	[0.133]
Signed Up Via Direct Mail	-1.276***	-1.223***	-1.201***
	[0.245]	[0.246]	[0.247]
Signed Up Via Internet	-1.399***	-1.409***	-1.417***
	[0.049]	[0.049]	[0.050]
Signed Up Via Late Renewal Application	0.840***	0.827***	0.781***
	[0.104]	[0.104]	[0.106]
Signed Up Via Outreach Strategies	0.609***	0.579***	0.487***
	[0.179]	[0.179]	[0.182]
Signed Up Via Telephone	-0.722***	-0.739***	-0.731***
	[0.051]	[0.051]	[0.052]
Signed Up Via SDG&E Customer Call Center Request	1.276***	1.260***	1.243***
	[0.070]	[0.070]	[0.072]
Signed Up Via Third Party	0.726***	0.687***	0.652***
	[0.148]	[0.148]	[0.150]
Unlinked Application	-1.304***	-1.299***	-1.317***
	[0.065]	[0.065]	[0.066]
PRIZM Median Household Income	-0.120***		
	[0.007]		
Fraction Below 200% of Poverty Threshold		1.297***	0.625***
		[0.091]	[0.135]
Fraction High School Diploma or Less			0.386**
			[0.150]
Average Household Size			0.149***
			[0.032]
Median Gross Rent			-0.227***
			[0.056]
Constant	4.640***	3.606***	3.608***
	[0.074]	[0.072]	[0.118]
Likelihood Ratio Test	10,537	10,485	10,193
Observations	33,760	33,757	32,867

Next consider the CARE program specific variables, which have very large explanatory power and are significant predictors of eligibility. As shown in Table 5 households that self-certify their income on the original application, compared to households that are categorically qualified, are significantly more likely to be ineligible. Households that use the internet or telephone to apply for the program, compared to households that use third parties or application requests from SDG&E's Customer Contact Center, are more likely to be ineligible. Finally, households with unlinked applications (essentially households that have moved during their CARE program experience) are more likely to be ineligible.

7. Post Enrollment Verification Model Update – Marginal Effects

The regression results reported in Table 5 identify which factors have a statistically significant effect on CARE program eligibility and the direction of that effect. They do not, however, identify the marginal effect of a change in any given attribute on CARE program eligibility rates. Consequently, in Table 6 we report how changes in the individual attributes affect CARE program eligibility rates using the logit models presented in Table 5. All marginal effects are calculated at the mean of the independent variables. As in Table 5 the dependent variable is binary indicator for CARE eligibility, standard errors are in brackets, and *, **, and *** indicate significance at 10,%, 5%, and 1%, respectively. Finally, the number of observations across specifications varies slightly due to missing census data.

A brief inspection of Table 6 reveals several interesting observations. First, *Home ownership* has a sizeable effect on CARE program eligibility in the SDG&E service area. Specifically, home ownership reduces eligibility by nearly 20 percent. Second, e*nergy usage* has a relative small impact on eligibility (e.g., an increase of 100 kWh/month in maximum summer energy usage decreases eligibility by approximately 0.3%). Likewise, a $10,000 change in PRIZM median income reduces eligibility by only 1.4%. Third, the CARE program specific characteristics have surprisingly large impacts on eligibility. In fact, they swamp the income and energy usage effects. For example, the income self-certification option (compared to categorical enrollment) reduces eligibility by 28 – 29 percent. Likewise, signing up via the internet or direct mail strongly increases the likelihood that the household is ineligible by 22 percent. And those

households with a unlinked application (individuals who have moved over their CARE history) are approximately 18% more likely to be ineligible.

Table 6
Post-Enrollment Verification Model Marginal Effects

Variable	(1)	(2)	(3)
Homeowner	-0.193***	-0.199***	-0.199***
	[0.005]	[0.005]	[0.005]
Maximum Summer KWH	-0.003***	-0.004***	-0.004***
	[0.001]	[0.001]	[0.001]
Self-certify Household Income Option	-0.291***	-0.287***	-0.279***
	[0.007]	[0.007]	[0.007]
Signed Up Via Door to Door	-0.001	-0.003	-0.012
	[0.015]	[0.015]	[0.016]
Signed Up Via Direct Mail	-0.221***	-0.208***	-0.199***
	[0.056]	[0.055]	[0.054]
Signed Up Via Internet	-0.222***	-0.224***	-0.221***
	[0.010]	[0.010]	[0.010]
Signed Up Via Late Renewal Application	0.072***	0.071***	0.066***
	[0.006]	[0.006]	[0.007]
Signed Up Via Outreach Strategies	0.056***	0.054***	0.045***
	[0.013]	[0.013]	[0.014]
Signed Up Via Telephone	-0.100***	-0.102***	-0.098***
	[0.008]	[0.008]	[0.008]
Signed Up Via SDG&E Customer Call Center Request	0.105***	0.104***	0.100***
	[0.004]	[0.004]	[0.004]
Signed Up Via Third Party	0.065***	0.062***	0.058***
	[0.010]	[0.010]	[0.010]
Unlinked Application	-0.186***	-0.184***	-0.183***
	[0.011]	[0.011]	[0.011]
PRIZM Median Household Income	-0.014***		
	[0.001]		
Fraction Below 200% of Poverty Threshold		0.148***	0.070***
		[0.010]	[0.015]
Fraction High School Diploma or Less			0.043**
			[0.017]
Average Household Size			0.017***
			[0.004]
Median Gross Rent			-0.025***
			[0.006]
Observations	33,758	33,755	32,865

Consider the results presented in Table 7. An alternative way to present the marginal effects is to show how the probability of being CARE eligible changes as a given variable changes, holding other variables at their mean values. For zero-one dichotomous variables (e.g., *home ownership*) this calculation is straight forward. However, there are two situations for which the procedure is slightly more complicated. First, for the continuous variables (*PRIZM Median Household Income* and *energy usage*) we examine a change from the 10^{th} percentile to the 90^{th} percentile rather than a change from zero to one. Second, variables that indicate how the application was received (e.g., internet, direct mail, etc.) cannot all be evaluated simultaneously. In these cases, when a given indicator is set to one the indicator for a unlinked application is set to zero and all other indicators for how an application was received are also set to zero. Thus, the predicted probability of 0.835 shown in third column corresponds to the probability of being CARE eligible for a customer whose application was received by SDG&E system (the omitted group). Also note that the predicted probability of being CARE eligible at the mean of all variables is 0.779.

Home ownership, self-certifying, signing up via the internet or telephone, and having a unlinked application (indicator of moving) have large negative impacts on eligibility. On the contrary households that sign up via a request from SDG&E Customer Contact Center or through outreach strategies or third parties are more likely eligible. Surprisingly, variation in neighborhood income or household energy use has a small effect on CARE eligibility. This latter result is inconsistent with the previous versions of CARE post-enrollment verification models. For example, in the 2006 Itron, Inc. update median household income was approximately twice as important compared to the results in Table 7. Likewise energy usage as measured by Maximum Summer kWh was roughly ten times more important in the Itron, Inc. model. This demonstrates the importance of evaluating a larger set of explanatory variables, especially those variables that are directly linked to income misrepresentation.

Table 7

Post-Enrollment Verification Model Marginal Effects

Variable	Yes	No	Difference
Homeowner	0.675	0.863	-0.188
Self-certify Income Household Income Option	0.679	0.923	-0.244
Signed Up Via Door to Door	0.834	0.835	-0.001
Signed Up Via Direct Mail	0.674	0.835	-0.161
Signed Up Via Internet	0.656	0.835	-0.179
Signed Up Via Late Renewal Application	0.907	0.835	0.072
Signed Up Via Outreach Strategies	0.890	0.835	0.055
Signed Up Via Phone	0.750	0.835	-0.085
Signed Up Via SDG&E Customer Call Center	0.934	0.835	0.099
Signed Up Via Third Party	0.899	0.835	0.064
Unlinked Application	0.670	0.835	-0.165
	10^{th} Percentile	90^{th} Percentile	Difference
PRIZM Median Household Income	0.823	0.736	0.087
Maximum Summer KWH	0.794	0.763	0.031

8. Post Enrollment Verification Model Update – Implementation

The estimated model is implemented in the following manner.

- Select a random sample of CARE participants.
- Calculate the predicted probability of eligibility using the one of the models specified in Table 5. In effect, substitute each CARE participant's attributes into the estimated equation, multiply each characteristic by the estimated coefficients (Table 5), and convert into predicted probability using $Predicted\ Probability(Eligible) = \frac{e^{Logit(p)}}{1+e^{Logit(p)}}$
- The mean probability of being CARE eligible in the sample should closely mirror the population, so it should be approximately 0.779.
- Establish a threshold (e.g., one standard deviation below the population mean of 0.779) that separates the sample into two groups – those that must participate in the verification process and those that are above the threshold and are automatically exempt and are deemed to be verified/re-certified by the PEV model.

As indicated above, the estimated probabilities ranged in value from zero to one and represent the likelihood that each household is CARE eligible. Consider the following example. The first household has the following attributes: (1) maximum summer electricity usage = 1,000 kWh; (2) home = owned by occupant; (3) neighborhood mean income = $100,000; (4) self-certified income; and (5) signed up via the internet. The predicted probability that this household is CARE eligible using Model 1 (Table 5) is 13.1%. Note that the average probability of CARE program eligibility is approximately 77.9%. So this example household is very likely not eligible for CARE. Alternatively, consider a household at the other end of the spectrum characterized by: (1) maximum summer electricity usage = 500 kWh; (2) home = not owned by occupant; (3) neighborhood mean income = $50,000; (4) signed up through categorical program; and (5) signed up via a third party. This household would have a predicted probability of eligibility of 99.0%. In effect, households deemed unlikely to be CARE eligible would be natural targets for post-enrollment verification and/or re-certification. In other words, these probabilities represent the likelihood that an individual household is misrepresenting their income and taking advantage of the system.

9. Concluding Remarks and Recommendations

The objective of this report was to provide an interim response to the CPUC directive that stated that each investor owned utility (IOU) must:

> "examine the totality of its CARE enrolled population, review past post enrollment and post re-certification income verification records and experiences, develop and implement an interim Post Enrollment and Post Re-certification Income Verification model, at a reasonable rate that each IOU deems reasonably necessary to: (1) ensure meaningful size in sampling to yield the necessary results to aid in the development of effective long term probability models for the Utilities; (2) ensure the integrity of the CARE Program; (3) provide assurance that CARE discount rates are received *only* by those lawfully intended to receive them …"

In response, we recommend the one stage modeling effort detailed above because of the following advantages. First, the recommended model is based on data internal to SDG&E as opposed to data from external surveys such as the Residential Appliance Saturation Survey (RASS). Second, the model is based on verified income as opposed to previous versions that relied on self-reported income, which is subject to both bias and possible misrepresentation. Third, the model contains a broad range of program specific variables that significantly improve the model fit and identify the important drivers of CARE program eligibility.

Going forward, we have the following two additional recommendations. First, data derived from the implementation of this modeling process should be closely tracked, monitored, and reviewed and lessons learned incorporated into the design of a permanent term probability model.

Second, our research uncovered some issues that should be investigated as development of a permanent PEV model is pursued. Most importantly, many household observations in the CARE data set did not have CARE application data. This tracking oversight, which occurs when the household moves, should be eliminated by linking the household application data to the new household address.

The importance of resolving the unlinked application data issue can be seen through an inspection of Tables 8 and 9 below. In Table 8, we provide summary statistics for two household groups, those with application data and those without. Note that the comparison information for each group is limited to neighborhood level data since the individual data are missing for one group. As is illustrated in Table 8, households with unlinked applications are less likely to be homeowners, use less energy, and live in neighborhoods that have lower income, education, and rents, and more poverty.

These trends are underscored by the regression results provided in Table 9, in which the dependent variable equals one if the CARE application is missing and zero otherwise. The estimated Logit coefficients are provided, with the standard errors in brackets and significance indicated by *, **, and *** for 10%; 5%, and 1%, respectively. Observations vary slightly across the two specifications due to missing census data. As illustrated, having a unlinked application is

negatively related to being a homeowner, maximum summer energy usage, and neighborhood income (Model 1). The only significant positive relationships are with neighborhood poverty and education levels (Model 2).

Table 8
Summary Statistics by CARE Application Data Availability

Variable	Missing CARE Application	Not Missing CARE Application
Number of Households	9,237	24,523
Homeowner	0.222	0.447
	(0.4162)	(0.4973)
Maximum Summer KWH	493	611
	(345)	(480)
PRIZM Median Household Income	47,966	55,479
	(20,920)	(23,499)
Median Household Income	55,366	63,016
	(25,530)	(28,504)
Fraction Below 200% of Poverty Threshold	0.383	0.324
	(0.213)	(0.2067)
Median Gross Rent	1,231	1,321
	(360)	(393)
Fraction High School Diploma or Less	0.441	0.392
	(0.2098)	(0.204)
Average Household Size	2.858	2.851
	(0.7359)	(0.7052)

Table 9
CARE Application Data Availability Models
Dependent Variable = Binary Indicator for Unlinked Application

Variable	(1)	(2)
Homeowner	-0.856***	-0.871***
	[0.030]	[0.030]
Maximum Summer KWH	-0.040***	-0.043***
	[0.004]	[0.004]
PRIZM Median Household Income	-0.066***	
	[0.006]	
Fraction Below 200% of Poverty Threshold		0.244**
		[0.098]
Fraction High School Diploma or Less		0.336***
		[0.118]
Average Household Size		-0.011
		[0.024]
Median Gross Rent		-0.080*
		[0.048]
Constant	-0.135***	-0.545***
	[0.033]	[0.080]
Observations	33,760	32,867

In effect, households with unlinked applications have *observable* neighborhood characteristics that would seem to make them more likely to be eligible for the CARE program (see Table 5). However, the results presented in Table 5 indicate that "unlinked application" has a significant negative effect on eligibility. The only way to make sense of these seemingly paradoxical results is to conclude that households with unlinked applications have *unobservable* characteristics (i.e., not observable because the application data are missing) such as how they signed up for the CARE program that overcome their observable neighborhood attributes. This conclusion is consistent with the results presented above and again suggests that the program specific characteristics are the really important drivers of CARE eligibility. Unfortunately, this latter speculation cannot be tested directly so it is important to continually link the household application to new addresses so that the corresponding household characteristics are not lost and are available for accurate testing.

10. References

E. Brunner, M. McNulty, and M. Thayer. Post-Enrollment Verification Model for the SDG&E California Alternate Rates for Energy Program, submitted to San Diego Gas & Electric, October 31, 2012.

CPUC Decision 12-08-044.

Itron, Inc. "Post-Enrollment Verification Models for SCG and SDG&E California Alternate Rates for Energy Programs," submitted to Southern California Gas Company and San Diego Gas & Electric, June 21 2006.

KEMA, Inc., "2009 California Residential Appliance Saturation Study Volume 1: Methodology," prepared for the California Energy Commission, October 2010, CEC-200- 2010-004.

Q1-3. How many customers removed from CARE due to non-response returned to the program within the indicated time frames? Please report each year separately, and respond with the cumulative total in each time frame. For example, a customer who was removed from CARE in September of 2017, and returned 5 months later, should be counted in both the "6 months" and the "1 year" columns for 2017 (columns C and D), but not in columns F and G.

	2017 [1]			2018 [1]		
	Total Removed in year	Returned within 6 months	Returned within 1 year	Total Removed in year	Returned within 6 months	Returned within 1 year
1. Non-Response to Recertification	8,147	2,003	2,799	6,114	1,606	2,163
2. Non-Response to Post-Enrollment Income Verification	7,924	983	1,284	7,463	1,284	1,593
3. Non-Response to High Usage Verification	5,416	326	419	10,594	5,589	5,836

[1] SDG&E updated its data platforms, now known as Envision, on April 4, 2021 via system migration and system enhancements. Due to system capabilities, historical data does not align for 2017 and 2018. The data reflected herein accurately reflects CARE activity using our current reporting systems.

Qs 4-6. Of the customers who were removed from CARE through the following processes, how many entered arrears within the indicated timeframes? Please report each year separately and respond with the cumulative total in each time frame. For example, a customer who was removed from CARE in September of 2017, and returned 5 months later, should be counted in both the "6 months" and the "1 year" columns for 2017 (columns B and C), but not in columns D and E.

	2017 [1]		2018 [2]	
	6 months	1 year	6 months	1 year
4. Non-response to Recertification	-	-	3,336	3,640
5. Non-Response to Post-Enrollment Income Verification	-	-	3,643	4,093
6. Non-Response to High Usage Verification	-	-	6,448	7,035

[1] The data for 2017 cannot be provided because SDG&E only retains three years of credit data.

[2] Since SDG&E only retains three years of credit data, the data for January through March is no longer available. Therefore, the response provides the requested data for April through December 2018 activity.

ATTACHMENT 6:

Excerpt of PG&E's response to Cal Advocates' Data Request, DR-CARE-PGE-02

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_029-Q04		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_029-Q04		
Request Date:	December 17, 2021	Requester DR No.:	CAL ADVOCATES-CARE-PGE-02
Date Sent:	December 30, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

The following questions make a distinction between CARE recertification, high usage post-enrollment verification (HU-PEV), and post-enrollment income verification (PEV). Where the questions refer to "recertification," this data request is referring to when a CARE customer must communicate with their utility that they still qualify for the discount program, excluding PEV and HU-PEV processes.

CARE CUSTOMER VERIFICATION

QUESTION 04

In 2017, how many unique CARE customers were subject to:

a. Recertification?

b. Post-enrollment income verification?

c. High-usage post-enrollment eligibility verification?

ANSWER 04

The table below shows the number of unique CARE customers subject to recertification, Standard PEV, and High Usage PEV in 2017.

Category	Count
Recertification	463,427
Standard PEV	43,361
High Usage PEV	36,404

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_029-Q04		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_029-Q04Supp01		
Request Date:	December 17, 2021 (Original) January 13, 2022 (Supplemental)	Requester DR No.:	CAL ADVOCATES-CARE-PGE-02
Date Sent:	December 30, 2021 (Original) January 14, 2022 (Supplemental)	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

The following questions make a distinction between CARE recertification, high usage post-enrollment verification (HU-PEV), and post-enrollment income verification (PEV). Where the questions refer to "recertification," this data request is referring to when a CARE customer must communicate with their utility that they still qualify for the discount program, excluding PEV and HU-PEV processes.

CARE CUSTOMER VERIFICATION

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In 2017, how many unique CARE customers were subject to:

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The table below shows the number of unique CARE customers subject to recertification, Standard PEV, and High Usage PEV in 2017.

Category	Count
Recertification	463,427
Standard PEV	43,361
High Usage PEV	36,404

QUESTION 04 SUPPLEMENTAL 01

Of the customers selected for recertification in 2017 and 2018, indicated in questions 4 and 5 of DR Cal Advocates-CARE-PGE-2, how many were automatically recertified?

ANSWER 04 SUPPLEMENTAL 01

Of the unique CARE customers subject to recertification in 2017, 230,859 customers were automatically recertified.

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_029-Q05		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_029-Q05		
Request Date:	December 17, 2021	Requester DR No.:	CAL ADVOCATES-CARE-PGE-02
Date Sent:	December 30, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

The following questions make a distinction between CARE recertification, high usage post-enrollment verification (HU-PEV), and post-enrollment income verification (PEV). Where the questions refer to "recertification," this data request is referring to when a CARE customer must communicate with their utility that they still qualify for the discount program, excluding PEV and HU-PEV processes.

CARE CUSTOMER VERIFICATION

QUESTION 05

In 2018, how many unique CARE customers were subject to:

a. Recertification?

b. Post-enrollment income verification?

c. High-usage post-enrollment eligibility verification?

ANSWER 05

The table below shows the number of unique CARE customers subject to Recertification, Standard PEV, and High Usage PEV in 2018.

Category	Count
Recertification	486,370
Standard PEV	46,737
High Usage PEV	22,280

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_029-Q05		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_029-Q05Supp01		
Request Date:	December 17, 2021 (Original) January 13, 2022 (Supplemental)	Requester DR No.:	CAL ADVOCATES-CARE-PGE-02
Date Sent:	December 30, 2021 (Original) January 14, 2022 (Supplemental)	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

The following questions make a distinction between CARE recertification, high usage post-enrollment verification (HU-PEV), and post-enrollment income verification (PEV). Where the questions refer to "recertification," this data request is referring to when a CARE customer must communicate with their utility that they still qualify for the discount program, excluding PEV and HU-PEV processes.

CARE CUSTOMER VERIFICATION

QUESTION 05

In 2018, how many unique CARE customers were subject to:

a. Recertification?

b. Post-enrollment income verification?

c. High-usage post-enrollment eligibility verification?

ANSWER 05

The table below shows the number of unique CARE customers subject to Recertification, Standard PEV, and High Usage PEV in 2018.

Category	Count
Recertification	486,370
Standard PEV	46,737
High Usage PEV	22,280

QUESTION 05 SUPP 01

Of the customers selected for recertification in 2017 and 2018, indicated in questions 4 and 5 of DR Cal Advocates-CARE-PGE-2, how many were automatically recertified?

ANSWER 05 SUPP 01

Of the unique CARE customers subject to recertification in 2018, 265,697 customers were automatically recertified.

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_029-Q06		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_029-Q06		
Request Date:	December 17, 2021	Requester DR No.:	CAL ADVOCATES-CARE-PGE-02
Date Sent:	December 30, 2021	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

The following questions make a distinction between CARE recertification, high usage post-enrollment verification (HU-PEV), and post-enrollment income verification (PEV). Where the questions refer to "recertification," this data request is referring to when a CARE customer must communicate with their utility that they still qualify for the discount program, excluding PEV and HU-PEV processes.

CARE CUSTOMER VERIFICATION

QUESTION 06

Is it possible for the same customer to be counted in more than one category provided in questions 4 and 5?

a. For example, could a CARE customer have been both subject to recertification and High-usage post-enrollment eligibility verification in a single year?

b. If not, what mechanism prevents this from occurring?

ANSWER 06

A small percentage (less than one percent) of customers were subject to HU PEV or Standard PEV following successful recertification in the same year. No customers are subject to recertification following PEV in a single year. This is prevented due to a customer being certified for a two-year period following successful completion of PEV.

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_029-Q07		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_029-Q07		
Request Date:	December 17, 2021	Requester DR No.:	CAL ADVOCATES-CARE-PGE-02
Date Sent:	January 12, 2022	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

The following questions make a distinction between CARE recertification, high usage post-enrollment verification (HU-PEV), and post-enrollment income verification (PEV). Where the questions refer to "recertification," this data request is referring to when a CARE customer must communicate with their utility that they still qualify for the discount program, excluding PEV and HU-PEV processes.

CUSTOMER DISCONNECTIONS

QUESTION 07

a. Of the customers removed from CARE due to non-response to recertification **in 2017 and 2018**, how many were disconnected from either gas or electric service within 6 months? Within 1 year?

b. Same as Q.7(a), but for customers removed due to non-response to PEV.

c. Same as Q.7(a), but for customers removed due to non-response to HU-PEV.

- For this response, if a customer is first disconnected from electric service due to non-payment, and subsequently disconnected for gas service because the customer continued to meet the disconnection eligibility threshold, please count this as 1 disconnection and not 2 separate disconnections (i.e., 1 disconnection for gas service and one disconnection for electric service).
- Please report each year separately and respond with the cumulative total in each time frame. For example, a customer who was removed from CARE in September of 2017, and was disconnected 5 months later, should be counted in both the "6 months" and the "1 year" totals for **2017** but **not** in any of the totals for 2018.

ANSWER 07

The table below shows the number of unique customers in each group that were disconnected from either gas or electric service within 6 months or 1 year.

	2017		2018	
	6 months	1 year	6 months	1 year
7a. Non-Response to Recertification	4,727	6,859	4,209	6,226
7b. Non-Response to Post-Enrollment Income Verification	1,573	2,508	831	1,294
7c. Non-Response to High Usage Verification	3,784	5,271	2,845	3,927

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_029-Q08		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_029-Q08		
Request Date:	December 17, 2021	Requester DR No.:	CAL ADVOCATES-CARE-PGE-02
Date Sent:	January 12, 2022	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

The following questions make a distinction between CARE recertification, high usage post-enrollment verification (HU-PEV), and post-enrollment income verification (PEV). Where the questions refer to "recertification," this data request is referring to when a CARE customer must communicate with their utility that they still qualify for the discount program, excluding PEV and HU-PEV processes.

CUSTOMER DISCONNECTIONS

QUESTION 08

a. In 2017, how many unique non-CARE residential customers were disconnected from gas or electric service? How many unique non-CARE residential customers were there in total at the beginning of the year? Please exclude customers who were removed from CARE in the prior 12 months.

b. Same as question 8(a), but for 2018.

c. Same as question 8(a), but for 2019.

ANSWER 08

The table below shows the unique non-CARE residential customer counts at the beginning of the year, excluding customers who were removed from CARE in the prior 12 months, and how many were disconnected from gas or electric service in 2017 – 2019.

	2017	**2018**	**2019**
Total Unique *Non-CARE* Customer Count	4,400,026	4,481,552	4,678,475
Unique *Non-CARE* Customer Disconnection Count	160,420	154,736	122,451

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_029-Q09		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_029-Q09		
Request Date:	December 17, 2021	Requester DR No.:	CAL ADVOCATES-CARE-PGE-02
Date Sent:	January 12, 2022	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

The following questions make a distinction between CARE recertification, high usage post-enrollment verification (HU-PEV), and post-enrollment income verification (PEV). Where the questions refer to "recertification," this data request is referring to when a CARE customer must communicate with their utility that they still qualify for the discount program, excluding PEV and HU-PEV processes.

CUSTOMER DISCONNECTIONS

QUESTION 09

a. In 2017, how many unique CARE customers were disconnected from gas or electric service? How many CARE customers were there in total at the beginning of the year?

b. Same as question 8(a), but for 2018.

c. Same as question 8(a), but for 2019.

ANSWER 09

The table below shows the unique CARE customer counts at the beginning of the year, and how many were disconnected from gas or electric service in 2017 – 2019.

	2017	**2018**	**2019**
Total Unique *CARE* Customer Count	1,423,324	1,406,396	1,376,003
Unique *CARE* Customer Disconnection Count	67,210	58,652	63,003

ATTACHMENT 7:

Excerpt of SCE's response to Cal Advocates' Data Request, DR-CARE-SCE-02

Southern California Edison

A.19-11-003 et al (A.19-11-004, A.19-04-005, A.19-04-006, and A.19-04-007) – 2021-2026 ESA-CARE

DATA REQUEST SET Cal Advocates-SCE-02

To: Cal Advocates
Prepared by: Anthony Abeyta
Job Title: CARE/FERA Program Advisor
Received Date: 12/17/2021

Response Date: 1/7/2022

Question 04:
"In 2017, how many unique CARE customers were subject to:
a. Recertification?
b. Post-enrollment income verification?
c. High-usage post-enrollment eligibility verification?"

Response to Question 04:
Please see the attached Excel workbook.

Southern California Edison

A.19-11-003 et al (A.19-11-004, A.19-04-005, A.19-04-006, and A.19-04-007) – 2021-2026 ESA-CARE

DATA REQUEST SET Cal Advocates-SCE-02

To: Cal Advocates
Prepared by: Anthony Abeyta
Job Title: CARE/FERA Program Advisor
Received Date: 12/17/2021

Response Date: 1/7/2022

Question 05:
"In 2018, how many unique CARE customers were subject to:
a. Recertification?
b. Post-enrollment income verification?
c. High-usage post-enrollment eligibility verification?"

Response to Question 05:
Please see the attached workbook.

CA ADVOCATES SCE-02 ANSWER TO QUESTIONS 4, 5 & 6

Submitted 28 December 2021

Table 1: NUMBER OF CARE CUSTOMERS EXPERIENCING EVENTS

(Answer to Questions 4 & 5)

CALENDAR YEAR	EVENT	NUMBER WHO EXPERIENCED EVENT*
2017	HIGH USAGE VERIFICATION (CAREHUVR)	*53,136*
	NON-HIGH USAGE VERIFICATION (VRFNRQST)	*63,334*
	RECERTIFICATION (RCRTRQST)	*507,283*
	TOTAL UNIQUE CARE SERVICE ACCOUNTS WITH AT LEAST ONE EVENT IN 2017	609,967
2018	HIGH USAGE VERIFICATION (CAREHUVR)	*68,050*
	NON-HIGH USAGE VERIFICATION (VRFNRQST)	*60,970*
	RECERTIFICATION (RCRTRQST)	*517,064*
	TOTAL UNIQUE CARE SERVICE ACCOUNTS WITH AT LEAST ONE EVENT IN 2018	629,147

**** There are duplications of service accounts in each of these three events for each calendar year. For example, while 53,136 CARE customers experienced high usage verification in 2017, some of these customers may have also experienced non-high usage verification in the same calendar year.***

Southern California Edison

A.19-11-003 et al (A.19-11-004, A.19-04-005, A.19-04-006, and A.19-04-007) – 2021-2026 ESA-CARE

DATA REQUEST SET Cal Advocates-SCE-02

To: Cal Advocates
Prepared by: Anthony Abeyta
Job Title: CARE/FERA Program Advisor
Received Date: 12/17/2021

Response Date: 1/7/2022

Question 06:
"Is it possible for the same customer to be counted in more than one category provided in questions 4 and 5?
a. For example, could a CARE customer have been both subject to recertification and High-usage post-enrollment eligibility verification in a single year?
b. If not, what mechanism prevents this from occurring?"

Response to Question 06:
It is possible for the same customer to be counted in more than one category in questions 4 and 5.

- A customer who has been recertified may be selected for Verification and/or High Usage Verification.
- A customer who has been Verified may be selected for High Usage Verification.

This is because each request has unique elements required by the customer to remain on CARE:

- Recertification is a self-declared submission only
- Verification requires submission of documentation to confirm eligibility
- High Usage Verification requires submission of documentation and requires the customer to participate in the Energy Savings Assistance Program (ESAP) and is subject to Usage Monitoring.

Please see the attached workbook for counts.

Table 2: COMBINATION OF EVENTS EXPERIENCED BY UNIQUE CARE SERVICE ACCOUNTS in CYs 2017 & 2018

(Answer to Question 6)

EVENTS	2017				2018			
	NUMBER of EVENTS			TOTAL	NUMBER of EVENTS			TOTAL
	1	2	3		1	2	3	
RECERTIFICATION ONLY	493,514	0	0	493,514	500,263	0	0	500,263
NON-HIGH USAGE VERIFICATION ONLY	55,582	0	0	55,582	55,203	0	0	55,203
CARE HIGH USAGE VERIFICATION ONLY	47,087	0	0	47,087	56,763	0	0	56,763
VERIFICATION & RECERTIFICATION	0	7,735	0	7,735	0	5,631	0	5,631
CARE HIGH USAGE VERIFICATION & RECERTIFICATION	0	6,032	0	6,032	0	11,151	0	11,151
CARE HIGH USAGE VERIFICATION & NON-HIGH USAGE VERIFICATION	0	15	0	15	0	117	0	117
CARE HIGH USAGE VERIFICATION, NON-HIGH USAGE VERIFICATION, & RECERTIFICATION	0	0	2	2	0	0	19	19
TOTAL UNIQUE SERVICE ACCOUNTS	596,183	13,782	2	609,967	612,229	16,899	19	629,147

NOTE: For example, in CY2017 there were 55,582 who experienced non-high usage verification while 7,735 experienced both non-high usage verification and recertification. Altogether, there were 13,782 CARE customers who experienced two events in CY2017.

Southern California Edison

A.19-11-003 et al (A.19-11-004, A.19-04-005, A.19-04-006, and A.19-04-007) – 2021-2026 ESA-CARE

DATA REQUEST SET C a l A d v o c a t e s - S C E - 0 2

To: Cal Advocates
Prepared by: Anthony Abeyta
Job Title: CARE/FERA Program Advisor
Received Date: 12/17/2021

Response Date: 1/7/2022

Question 07:
"a. Of the customers removed from CARE due to non-response to recertification in 2017 and 2018, how many were disconnected from electric service within 6 months? Within1 year?
b. Same as question 7(a), but for customers removed due to non-response to PEV.
c. Same as question 7(a), but for customers removed due to non-response to HU-PEV.

For this response, if a customer is first disconnected from electric service due to non-payment, and subsequently disconnected for gas service because the customer continued to meet the disconnection eligibility threshold, please count this as 1 disconnection and not 2 separate disconnections (i.e. 1 disconnection for gas service and one disconnection for electric service).

Please report each year separately and respond with the cumulative total in each time frame. For example, a customer who was removed from CARE in September of 2017, and was disconnected 5 months later, should be counted in both the ""6 months"" and the ""1 year"" totals for 2017 but not in any of the totals for 2018."

Response to Question 07:
Please see the attached workbook.

RESPONSE TO QUESTION 7

Submitted 30 December 2021

Of the customers removed from CARE due to non-response to recertification or verification in 2017 and 2018, this table shows the number disconnected from electric service within six or twelve months

YEAR	EVENT	NUMBER OF CUSTOMERS DISCONNECTED WITHIN SIX MONTHS	NUMBER OF CUSTOMERS DISCONNECTED WITHINONE YEAR
2017	HIGH USAGE VERIFICATION	4,229	9,485
	RECERTIFICATION	7,327	15,868
	NON-HIGH USAGE VERIFICATION	1,726	4,194
	TOTAL	13,282	29,547
2018	HIGH USAGE VERIFICATION	5,202	11,347
	RECERTIFICATION	7,130	15,958
	NON-HIGH USAGE VERIFICATION	2,534	5,816
	TOTAL	14,866	33,121

Southern California Edison

A.19-11-003 et al (A.19-11-004, A.19-04-005, A.19-04-006, and A.19-04-007) – 2021-2026 ESA-CARE

DATA REQUEST SET C a l A d v o c a t e s - S C E - 0 2

To: Cal Advocates
Prepared by: Anthony Abeyta
Job Title: CARE/FERA Program Advisor
Received Date: 12/17/2021

Response Date: 1/7/2022

Question 08:
"a. In 2017, how many unique non-CARE residential customers were disconnected from electric service? How many unique non-CARE residential customers were there in total at the beginning of the year? Please exclude customers who were removed from CARE in the prior 12 months.
b. Same as question 8(a), but for 2018.
c. Same as question 8(a), but for 2019."

Response to Question 08:
Please see the attached workbook.

Southern California Edison

A.19-11-003 et al (A.19-11-004, A.19-04-005, A.19-04-006, and A.19-04-007) – 2021-2026 ESA-CARE

DATA REQUEST SET Cal Advocates-SCE-02

To: Cal Advocates
Prepared by: Anthony Abeyta
Job Title: CARE/FERA Program Advisor
Received Date: 12/17/2021

Response Date: 1/7/2022

Question 09:
"a. In 2017, how many unique CARE customers were disconnected from electric service? How many CARE customers were there in total at the beginning of the year?
b. Same as question 8(a), but for 2018.
c. Same as question 8(a), but for 2019."

Response to Question 09:
Please see the attached workbook.

SCE-02 ANSWER TO QUESTIONS 8 & 9

Submitted 3 January 2022

CALENDAR YEAR (CY)	NON-CARE (Question 8)			CARE (Question 9)	
	BEGINNING of YEAR[1/]	REMOVED from CARE in PRIOR CY[2/]	DISCONNECTIONS in CY[3/]	BEGINNING of YEAR[4/]	DISCONNECTIONS in CY[5/]
2017	3,190,584	26,567	188,965	1,235,889	65,539
2018	3,177,860	24,088	189,717	1,224,623	66,140
2019	3,229,302	27,172	177,671	1,203,474	63,995

NOTES:

[1/] Total residential customers in January of CY minus total CARE customers in January of CY. Source: RDR Monthly for CY, CARE Table 8.

[2/] Unique service accounts excluded from total # non-CARE who had disconnections in calendar year.

[3/] Unique non-CARE service accounts, i.e. excluding those who were removed from CARE the year before, with disconnections in CY.

[4/] Total CARE customers in January of CY. Source: RDR Monthly for CY, CARE Table 8.

[5/] Unique CARE service accounts with disconnections in CY. Customers with at least one monthly disconnection in CARE rate are classified as CARE.

ATTACHMENT 8:

Excerpt of SoCalGas's response to Cal Advocates' Data Request, DR-CARE-SCG-02

QUESTION 6:

Is it possible for the same customer to be counted in more than one category provided in questions 4 and 5?

a. For example, could a CARE customer have been both subject to recertification and post-enrollment income verification in a single year?

b. If not, what mechanism prevents this from occurring?

RESPONSE 6:

It is possible for the same customer to be counted in more than one category provided in questions 4 and 5.

A CARE customer can be subjected to both recertification and post-enrollment income verification in a single year.

SOUTHERN CALIFORNIA GAS COMPANY

(DATA REQUEST CAL ADVOCATES-CARE-SCG-02)
Q 4,5,7,8 and 9 – Submitted January 13, 2022

QUESTION 4:

In 2017, how many unique CARE customers were subject to:

a. Recertification?
b. Post-enrollment income verification?

RESPONSE 4:

a. In 2017, 372,114 unique CARE customers were selected for recertification.
b. In 2017, 27,614 unique CARE customers were selected for post-enrollment verification.

QUESTION 5:

In 2018, how many unique CARE customers were subject to:

a. Recertification?
b. Post-enrollment income verification?

RESPONSE 5:

a. In 2018, 375,990 unique CARE customers were selected for recertification.
b. In 2018, 50,791 unique CARE customers were selected for post-enrollment verification.

SOUTHERN CALIFORNIA GAS COMPANY

(DATA REQUEST CAL ADVOCATES-CARE-SCG-02)
Q 4,5,7,8 and 9 – Submitted January 13, 2022

QUESTION 7:

CUSTOMER DISCONNECTIONS

a. Of the customers removed from CARE due to non-response to recertification in 2017 and 2018, how many were disconnected from gas service within 6 months? Within 1 year?

b. Same as question 7(a), but for customers removed due to non-response to PEV.

• For this response, if a customer is first disconnected from electric service due to non-payment, and subsequently disconnected for gas service because the customer continued to meet the disconnection eligibility threshold, please count this as 1 disconnection and not 2 separate disconnections (i.e.,1 disconnection for gas service and one disconnection for electric service).

• Please report each year separately and respond with the cumulative total in each time frame. For example, a customer who was removed from CARE in September of 2017, and was disconnected 5 months later, should be counted in both the "6 months" and the "1 year" totals for 2017 but not in any of the totals for 2018.

RESPONSE 7:

In 2017, of the customers removed from CARE due to non-response to recertification, 376 customers were disconnected from gas service due to non-payment within 6 months, and 704 customers were disconnected due to non-payment within 1 year.

In 2017, of the customers removed from CARE due to non-response to Post Enrollment Verification (PEV), 23 customers were disconnected from gas service due to non-payment within 6 months, and 47 customers were disconnected due to non-payment within a year.

In 2018, of the customers removed from CARE due to non-response to recertification, 367 customers were disconnected from gas service due to non-payment within 6 months, and 644 customers were disconnected due to non-payment within 1 year.

In 2018, of the customers removed from CARE due to non-response to PEV, 297customers were disconnected from gas service due to non-payment within 6 months, and 177 customers were disconnected due to non-payment within a year.

	2017	2018

SOUTHERN CALIFORNIA GAS COMPANY

(DATA REQUEST CAL ADVOCATES-CARE-SCG-02)
Q 4,5,7,8 and 9 – Submitted January 13, 2022

	Total Removed in year	Disconnected within 6 months	Disconnected within 1 year	Total Removed in year	Disconnected within 6 months	Disconnected within 1 year
7a. Non-Response to Recertification	130,347	376	704	144,530	367	644
7b. Non-Response to PEV	13,801	23	47	27,148	97	177

QUESTION 8:

a. In 2017, how many unique non-CARE residential customers were disconnected from gas service? How many unique non-CARE residential customers were there in total at the beginning of the year? Please exclude customers who were removed from CARE in the prior 12 months.

b. Same as question 8(a), but for 2018.

c. Same as question 8(a), but for 2019.

RESPONSE 8:

In 2017, 64,064 non-CARE residential customers were disconnected from gas service due to non-payment; 49,321 unique customers were subsequently reconnected. There were 3,927,172 non-CARE residential customers at the beginning of the year.

In 2018, 46,955 non-CARE residential customers were disconnected from gas service due to non-payment; 35,027 unique customers were subsequently reconnected. There were 3,962,114 non-CARE residential customers at the beginning of the year.

In 2019, 38,135 non-CARE residential customers were disconnected from gas service due to non-payment; 29,195 unique customers were subsequently reconnected. There were 3,944,583 non-CARE residential customers at the beginning of the year.

	2017		2018		2019	
	Customers Beginning of year	Disconnected FNP	Customers Beginning of year	Disconnected FNP	Customers Beginning of year	Disconnected FNP
8. Non-CARE Customers	3,927,172	64,064	3,962,114	46,955	3,944,583	38,135

SOUTHERN CALIFORNIA GAS COMPANY

(DATA REQUEST CAL ADVOCATES-CARE-SCG-02)
Q 4,5,7,8 and 9 – Submitted January 13, 2022

QUESTION 9:

a. In 2017, how many unique CARE customers were disconnected from gas service? How many CARE customers were there in total at the beginning of the year?

b. Same as question 8(a), but for 2018. c. Same as question 8(a), but for 2019.

RESPONSE 9:

In 2017, 46,861 CARE customers were disconnected from gas service due to non-payment; 39,754 unique customers were subsequently reconnected. There were 1,586,176 CARE customers at the beginning of the year.

In 2018, 53,348 CARE customers were disconnected from gas service due to non-payment; 46,455 unique customers were subsequently reconnected. There were 1,585,842 CARE customers at the beginning of the year.

In 2019, 49,154 CARE customers were disconnected from gas service due to non-payment; 42,213 unique customers were subsequently reconnected. There were 1,638,103 CARE customers at the beginning of the year.

	2017		2018		2019	
	Customers Beginning of year	Disconnected FNP	Customers Beginning of year	Disconnected FNP	Customers Beginning of year	Disconnected FNP
9. CARE Customers	1,586,176	46,861	1,585,842	53,348	1,638,103	49,154

Buchholz, Adam

From: Holland, Brooke <AHolland@socalgas.com>
Sent: Friday, January 14, 2022 11:04 AM
To: Clements, Augustus
Cc: Yu, Crystal; Buchholz, Adam
Subject: [EXTERNAL] Re: Re: Re: Re: Re: Fwd: Data Request Cal Advocates DR-CARE-SCG-02, Due 12/31

Hi Augustus and team,

Customers who were automatically recertified and not mailed a recertification application:
2017 - 186,850
2018 - 212,134

Please do not hesitate to reach out with anymore questions.

Thanks,
Brooke

Brooke Holland
Regulatory Affairs
(615) 557-6172

From: Holland, Brooke <AHolland@socalgas.com>
Sent: Thursday, January 13, 2022 1:10:27 PM
To: Clements, Augustus <Augustus.Clements@cpuc.ca.gov>
Cc: Yu, Crystal <Crystal.Yu@cpuc.ca.gov>; Buchholz, Adam <Adam.Buchholz@cpuc.ca.gov>
Subject: Re: [EXTERNAL] Re: Re: Re: Re: Fwd: Data Request Cal Advocates DR-CARE-SCG-02, Due 12/31

Hi Augustus,

Received - I'll ask the team now. Thank you!

Brooke Holland
Regulatory Affairs
(615) 557-6172

From: Clements, Augustus <Augustus.Clements@cpuc.ca.gov>
Sent: Thursday, January 13, 2022 12:18:22 PM
To: Holland, Brooke <AHolland@socalgas.com>
Cc: Yu, Crystal <Crystal.Yu@cpuc.ca.gov>; Buchholz, Adam <Adam.Buchholz@cpuc.ca.gov>
Subject: RE: [EXTERNAL] Re: Re: Re: Re: Fwd: Data Request Cal Advocates DR-CARE-SCG-02, Due 12/31

ATTACHMENT 9:

Excerpt of SDG&E's response to Cal Advocates' Data Request, DR-CARE-SDGE-02

CAL ADVOCATES DATA REQUEST
CAL ADVOCATES-CARE-SDGE-02
CARE
DATE RECEIVED: DECEMBER 17, 2021
DATE RESPONDED: JANUARY 10, 2022

CARE CUSTOMER VERIFICATION

4. In 2017, how many unique CARE customers were subject to:
    a. Recertification?
    b. Post-enrollment income verification?
    c. High-usage post-enrollment eligibility verification?

SDG&E Response 4:
In 2017, the following number of unique CARE customers were subject to:
    a. Recertification: 39,652
    b. Post-enrollment income verification: 16,096
    c. High-usage post-enrollment eligibility verification: 7,198

CAL ADVOCATES DATA REQUEST
CAL ADVOCATES-CARE-SDGE-02
CARE
DATE RECEIVED: DECEMBER 17, 2021
DATE RESPONDED: JANUARY 10, 2022

5. In 2018, how many unique CARE customers were subject to:
   a. Recertification?
   b. Post-enrollment income verification?
   c. High-usage post-enrollment eligibility verification?

SDG&E Response 5:
In 2018, the following number of unique CARE customers were subject to:
   a. Recertification: 36,748
   b. Post-enrollment income verification: 14,901
   c. High-usage post-enrollment eligibility verification: 10,858

CAL ADVOCATES DATA REQUEST
CAL ADVOCATES-CARE-SDGE-02
CARE
DATE RECEIVED: DECEMBER 17, 2021
DATE RESPONDED: JANUARY 10, 2022

6. Is it possible for the same customer to be counted in more than one category provided in questions 4 and 5?
    a. For example, could a CARE customer have been both subject to recertification and High-usage post-enrollment eligibility verification in a single year?
    b. If not, what mechanism prevents this from occurring?

SDG&E Response 6:
Yes, as illustrated in Question 6a, it is possible for the same customer to be counted in more than one category provided in questions 4 and 5.

a. Yes, a CARE customer could be subject to both recertification and high-usage post-enrollment eligibility verification in a single year
b. There is no mechanism to prevent this from occurring. One exception is if a customer completes PEV prior to their recertification date for a given year, then PEV will satisfy the recertification requirement and the customer will not receive a recertification request.

CAL ADVOCATES DATA REQUEST
CAL ADVOCATES-CARE-SDGE-02
CARE
DATE RECEIVED: DECEMBER 17, 2021
DATE RESPONDED: JANUARY 10, 2022

CUSTOMER DISCONNECTIONS

7. a. Of the customers removed from CARE due to *non-response* to recertification **in 2017 and 2018**, how many were disconnected from either gas or electric service within 6 months? Within 1 year?
b. Same as question 7(a), but for customers removed due to non-response to PEV.
c. Same as question 7(a), but for customers removed due to non-response to HU-PEV.

• For this response, if a customer is first disconnected from electric service due to non-payment, and subsequently disconnected for gas service because the customer continued to meet the disconnection eligibility threshold, please count this as 1 disconnection and not 2 separate disconnections (i.e., 1 disconnection for gas service and one disconnection for electric service).

• Please report each year separately and respond with the cumulative total in each time frame. For example, a customer who was removed from CARE in September of 2017, and was disconnected 5 months later, should be counted in both the "6 months" and the "1 year" totals for **2017** but **not** in any of the totals for 2018.

SDG&E Response 7:

7.a	Non-Response to Recertification	
Year	Number of customers disconnected within 6mo	Number of customers disconnected within 1yr
2017	737	1,330
2018	907	1,575

7.	PEV	
Year	Number of customers disconnected within 6mo	Number of customers disconnected within 1yr
2017	126	250
2018	169	280

7.c	HU-PEV	
Year	Number of customers disconnected within 6mo	Number of customers disconnected within 1yr
2017	376	642
2018	555	962

CAL ADVOCATES DATA REQUEST
CAL ADVOCATES-CARE-SDGE-02
CARE
DATE RECEIVED: DECEMBER 17, 2021
DATE RESPONDED: JANUARY 10, 2022

8. a. In 2017, how many unique non-CARE residential customers were disconnected from gas or electric service? How many unique non-CARE residential customers were there in total at the beginning of the year? Please exclude customers who were removed from CARE in the prior 12 months.
b. Same as question 8(a), but for 2018.
c. Same as question 8(a), but for 2019.

SDG&E Response 8:

8.a	2017	
	Total unique non-CARE customers beginning year	1,012,325
	Unique non-CARE customers disconnected	19,608

8.b	2018	
	Total unique non-CARE customers beginning year	993,719
	Unique non-CARE customers disconnected	22,014

8.c	2019	
	Total unique non-CARE customers beginning year	999,792
	Unique non-CARE customers disconnected	18,885

CAL ADVOCATES DATA REQUEST
CAL ADVOCATES-CARE-SDGE-02
CARE
DATE RECEIVED: DECEMBER 17, 2021
DATE RESPONDED: JANUARY 10, 2022

9. a. In 2017, how many unique CARE customers were disconnected from gas or electric service? How many CARE customers were there in total at the beginning of the year?
b. Same as question 8(a), but for 2018.
c. Same as question 8(a), but for 2019.

SDG&E Response 9:

9.a	2017	
	Total unique CARE customers beginning year	257,892
	Unique CARE customers disconnected	10,490

9.b	2018	
	Total unique CARE customers beginning year	269,241
	Unique CARE customers disconnected	11,049

9.c	2019	
	Total unique CARE customers beginning year	275,186
	Unique CARE customers disconnected	10,735

CAL ADVOCATES DATA REQUEST
CAL ADVOCATES-CARE-SDGE-02
CARE
DATE RECEIVED: DECEMBER 17, 2021
DATE RESPONDED: JANUARY 10, 2022

Subject: The following questions make a distinction between CARE recertification, high usage post-enrollment verification (HU-PEV), and post-enrollment income verification (PEV). Where the questions refer to "recertification," this data request is referring to when a CARE customer must communicate with their utility that they still qualify for the discount program, excluding PEV and HU-PEV processes.

CARE CUSTOMER VERIFICATION

4. In 2017, how many unique CARE customers were subject to:
   a. Recertification?
   b. Post-enrollment income verification?
   c. High-usage post-enrollment eligibility verification?

SDG&E Response 4:
In 2017, the following number of unique CARE customers were subject to:

a. Recertification: 39,652

Supplemental Response:
In the original request for DR-CARE-SDGE-02, SDG&E interpreted Question 4 as a request to provide the number of customers who were required to provide documentation for recertification. Per the follow-up request from Cal Advocates, SDG&E has modified the response for Question 4 to also include the number of customers who were automatically recertified and not required to submit documentation.

Provided Required Documentation: 39,652
Automated Recertification: 45,644

b. Post-enrollment income verification: 16,096

c. High-usage post-enrollment eligibility verification: 7,198

CAL ADVOCATES DATA REQUEST
CAL ADVOCATES-CARE-SDGE-02
CARE
DATE RECEIVED: DECEMBER 17, 2021
DATE RESPONDED: JANUARY 10, 2022

5. In 2018, how many unique CARE customers were subject to:
   a. Recertification?
   b. Post-enrollment income verification?
   c. High-usage post-enrollment eligibility verification?

SDG&E Response 5:
In 2018, the following number of unique CARE customers were subject to:

a. Recertification: 36,748

Supplemental Response:
In this original request for DR-CARE-SDGE-02, SDG&E interpreted Question 5 as a request to provide the number of customers who were required to provide documentation for recertification. Per the follow-up request from Cal Advocates, SDG&E has modified the response for Question 5 to also include the number of customers who were automatically recertified and not required to submit documentation.

Provided Required Documentation: 36,748
Automated Recertification: 41,344

b. Post-enrollment income verification: 14,901

c. High-usage post-enrollment eligibility verification: 10,858

ATTACHMENT 10:

Excerpt of PG&E's Advice Letter 6434-E, submitted on December 15, 2021

Pacific Gas and Electric Company®

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December 15, 2021

Advice 6434-E
(Pacific Gas and Electric Company U 39 E)

Public Utilities Commission of the State of California

Subject: **Information-only Advice Letter on Pacific Gas and Electric Company's Progress to Increase Family Electric Rate Assistance Program Enrollment per Decision (D.) 18-08-013.**

Purpose

In compliance with Decision (D.) 18-08-013, issued on August 17, 2018 in Pacific Gas and Electric Company's (PG&E) 2017 General Rate Case (GRC) Phase 2 Proceeding, PG&E submits this information-only Advice Letter (AL) to report on its progress to increase Family Electric Rate Assistance (FERA) program enrollment.[1]

Background

The FERA program (also known as the Lower-Middle Income Large Household Program) provides rate assistance to large households of lower-to-middle-income customers.[2] The FERA program was designed to assist larger families that are ineligible for the California Alternate Rates for Energy Program (CARE) rate because their income level falls slightly above the CARE program income eligibility limit.

FERA is available for households of three or more individuals that have a total household income of between 200% plus $1 and 250% of the Federal Poverty Level (FPL) guideline.[3] The income threshold increases with each additional family member over three people. Eligible FERA participants currently receive an 18% bill discount for their electric usage.[4]

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[1] D.18-08-013, Ordering Paragraph (OP) 15, states, "PG&E shall report to Energy Division by the end of 2018, 2019, 2020, 2021, 2022, and 2023 on its progress to increase FERA subscription by filing information-only advice letters that are served on the service list of this proceeding."

[2] The Commission authorized the FERA program in D.04-02-057.

[3] D.05-10-044 increased the lower income limits of the FERA Program were raised to 200%+$1 of the Federal Poverty Guideline levels.

[4] In D.15-07-001, the Commission changed PG&E's FERA discount to a 12% effective discount as a single line-item on PG&E's bills. In 2018, Senate Bill (SB) 1135 amended Public Utilities Code Section 739.12 to increase the FERA discount to 18% effective January 1, 2019.

In PG&E's 2017 GRC Phase II proceeding, the California Public Utilities Commission (CPUC or Commission) expressed concern that the FERA program is not highly customer subscribed.[5] Noting that PG&E's CARE customer participation rate is much higher than its FERA participation rate, the Commission ruled:

> *It is appropriate and necessary for PG&E to significantly increase its rate of FERA participation. Ultimately, PG&E should achieve a similar subscription level for FERA as for CARE. At this time, we require PG&E to make significant efforts to increase its FERA subscription level over the next six years, with the aim of achieving a 50% subscription level.*[6]

The 2017 GRC Phase II decision prescribed several actions for PG&E to increase FERA participation, including: focusing efforts on the Central Valley (CV), conducting one or more workshops in the CV, and submission of an updated AL to inform the Commission of PG&E's plan to use unspent CARE marketing funds to increase FERA enrollment.[7] Included in these requirements is an order to submit an information-only AL to report on FERA participation progress. The AL is to be filed at the end of each year through 2023.[8]

Progress Report Toward Increasing FERA Enrollment

In compliance with D.18-08-013, PG&E hereby reports on its progress toward increasing FERA enrollment from December 1, 2020 until November 30, 2021. FERA statistics for the month of December 2021 are not available at the time of this AL submittal.

[5] D.18-08-013, p. 74.
[6] *Id.*, p. 75.
[7] *Id.* PG&E filed Advice Letter 3990-G-B/5329-E-B on October 8, 2018 to detail its marketing plans to increase FERA enrollment.
[8] *Id.,* OP 15.

I. Participant Information

Table 1: FERA Program Enrollment from December 1, 2020 - November 30, 2021

Month/Year	FERA Estimated Eligible Customers	FERA Enrolled Customers	FERA Penetration Rate	Discount Provided to FERA- Enrolled Customers
December 2020	166,357	34,692	21%	$1,120,893.49
January 2021	152,625	35,592	23%	$1,106,214.92
February 2021	152,625	36,692	24%	$ 946,611.36
March 2021	152,625	37,269	24%	$1,073,832.76
April 2021	152,625	37,701	25%	$1,012,122.66
May 2021	152,625	38,136	25%	$ 975,415.87
June 2021	152,625	38,371	25%	$1,305,589.36
July 2021	152,625	39,107	26%	$1,638,025.82
August 2021	152,625	39,795	26%	$1,731,015.87
September 2021	152,625	40,117	26%	$1,572,829.60
October 2021	152,625	40,940	27%	$1,181,413.77
November 2021*	152,625	38,758	25%	$907,498.98
Total	***152,625***	***40,940***	***27%***	***$14,571,464.46***

(a) Final annual data for 2021 will be reported in the FERA Annual Report, to be filed on May 2022.

II. Marketing

Key Findings:

- Despite executing FERA specific marketing campaigns to FERA expected eligible target audience, 84% of responders enroll in CARE.
- A Q3 targeted marketing campaign with FERA-specific messaging drove more than six CARE enrolments to every one FERA enrollment.
- The presentment of FERA and CARE on the same application negatively impacts the ability to grow FERA penetration rates at the pace needed to achieve 50% enrollment goal.
- PG&E tested a new FERA Propensity model in the Q3 2021 acquisition campaign and achieved a 10% lift in response rates in the top decile compared to the previous model.
- Online enrollments continue to be the top channel of choice for new FERA enrollments delivering 74% of total new enrollments
- 2.2M bill inserts delivered 297 new FERA enrollments.

Based on the directives in D.18-08-013, PG&E developed and submitted the Marketing and Outreach (M&O) Plan for the FERA program via PG&E's AL 3990-G-B/5329-E-B on October 8, 2018. The M&O Plan detailed PG&E's proposals for using 2018 through 2020 available and unspent marketing funds allocated to the CARE program to increase customer enrollment into the FERA program. Also as directed in D.18-08-013, PG&E proposed a longer-term FERA specific M&O proposal and budget in its Testimony for 2021-2026 Low-Income programs and budgets application, filed on November 4, 2019.[9] The proposed FERA M&O strategies and budgets for 2021-2026 program years were generally approved in D.21-06-015, issued on June 7, 2021.[10]

In 2021, PG&E continued to execute and evolve the strategies outlined in the M&O plan to grow FERA awareness and enrollment:

- Build FERA awareness through continued marketing and outreach efforts.
- Test, learn and optimize, evolving outreach strategies and tactics based on results, and application of lessons learned.
- Use of channels that were successful in driving CARE acquisition to effectively reach FERA customers.
- Leverage customer insights and research to inform FERA messaging development and testing for FERA outreach.

PG&E continues to leverage best practices and optimize outreach efforts. Marketing efforts in 2021 focused on evolving targeting capabilities and improving message effectiveness. Test plans were designed and implemented throughout the year to improve FERA enrollment.

Another key driver for the increase was the continued pause of post-enrollment verification and recertification processes, as part of the Commission's direction to PG&E in Resolution M-4842 [EMERGENCY AUTHORIZATION AND ORDER DIRECTING UTILITIES TO IMPLEMENT EMERGENCY CUSTOMER PROTECTIONS TO SUPPORT CALIFORNIA CUSTOMERS DURING THE COVID-19 PANDEMIC] to offer emergency customer protections.[11] The lack of normal program attrition plus the new enrollment driven by marketing drove a 17% year over year increase in enrollment penetration (23% in January 2021 vs 27% in December 2021).

Despite increases in marketing and concentrated effort towards continuous improvement, had recertification and post-enrollment verification been active in 2021, the final penetration rate would have been lower based on historical attrition rates. Results from 2021 emphasize the challenge to effectively target and enroll customers in the FERA program.

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[9] PG&E Testimony, Chapter II, Section H.

[10] D.21-06-015, Section 5, p. 102.

[11] Resolution M-4842, p. 5 (April 16, 2020). https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M333/K482/333482381.PDF

PG&E believes that the obstacles to success outlined in previous reports will persist despite active and aggressive pursuit of the penetration rate goal established by D. 21-06-015.[12] Noted obstacles include:

- The small number of estimated eligible customers which makes effective targeting to the intended audience very difficult.
- The CARE and FERA program mandate to include a shared application.
- The small difference in income requirements between the two programs which make it likely that customers may inadvertently (or purposefully) estimate income within the range eligible for CARE discount.

- **Direct Mail and Email Marketing**

  PG&E continued to execute quarterly, multi-touch targeted marketing campaigns using direct mail and email. The audience for the campaigns used a FERA-specific targeting model, which identifies customers likely eligible to enroll in the FERA program. Using the model, residential customers receive a score, with a score of one being the most likely to be to participate and a score of ten being less likely.

  The campaigns used FERA focused messaging to the FERA audience segments. This approach was based on consistent results from message testing in 2019 and 2020 that showed enrollment rates for program-specific messaging were consistently higher for each audience segment than the combined CARE/FERA message.

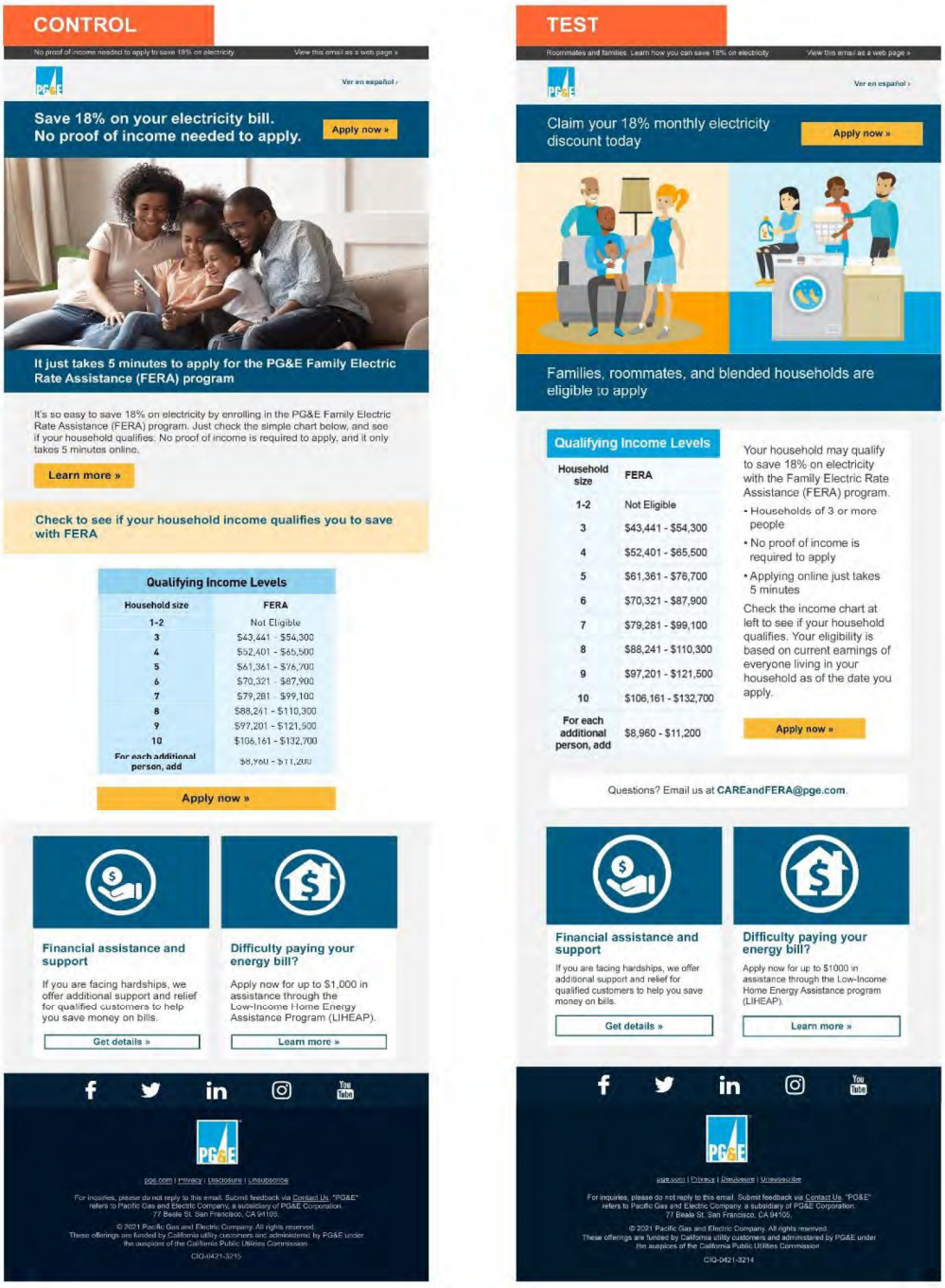
  PG&E also leveraged the results of messaging and direct mail package research conducted in late 2020 to develop test plans for 2021. The new "winning" creative message from the 2020 research was produced and used in acquisition campaigns over two consecutive quarters, with a 50/50 split between the FERA Control message and the FERA Test message (Figure 1).

  Based on the research conducted in 2020, the winning creative version was designed to address a possible confusion point that the program name - Family Electric Rate Assistance – might imply that only families are eligible to participate. The creative used illustrations and content to highlight that different household types may be eligible for FERA, with specific language that roommates, families and blended family households are eligible to apply.

  To demonstrate the ease of the process, the email headline and bullet points in the body copy highlight the expected time it takes to fill out the online application, and that applying does not require proof of income.

[12] D.21-06-015, OP 24.

Figure 1 – Sample of FERA Control and Test creative versions



The Q2 Campaign results showed that the FERA Control message generated a statistically higher CARE enrollment rate across both the FERA Newly Eligible and Non-Responder audience segments (noted in Table 2 below).

Table 2 - CARE Enrollment by Audience and Creative Version

Audience Segment	Creative Version	# contacted	# enroll	% enroll
FERA Newly Eligible	FERA Only Control Message	101,483	1,518	1.50%
FERA Newly Eligible	FERA Only Test Message	101,489	1,377	1.36%
FERA Non-Responder	FERA Only Control Message	72,840	1,334	1.83%
FERA Non-Responder	FERA Only Test Message	72,844	1,197	1.64%

However, FERA enrollment rates were similar for both the Control and Test creative versions (Table 3 below).

Table 3 - FERA Enrollment by Audience and Creative Version

Audience Segment	Creative Version	# contacted	# enroll	% enroll
FERA Newly Eligible	FERA Only Control Message	101,483	298	0.29%
FERA Newly Eligible	FERA Only Test Message	101,489	284	0.28%
FERA Non-Responder	FERA Only Control Message	72,840	206	0.28%
FERA Non-Responder	FERA Only Test Message	72,844	187	0.26%

Results from early Q3 campaign analysis conducted in late October 2021 were consistent with the findings from Q2. Because the FERA Control message had a better CARE enrollment rate, the FERA Only Control Message is considered more efficient in terms of overall enrollments generated. Although the Test version did not outperform the Control version, PG&E believes there is merit to making the program guidelines clear and specific. PG&E plans to continue using the original Control message for acquisition campaigns in 2022, and will consider further message testing and creative optimization to address potential enrollment barriers.

For PG&E's territory, the CARE estimated eligible population is 90% of the total CARE and FERA estimated eligible population.[13] In 2021, an average of 84% of the total enrollments from the FERA targeted campaigns were CARE enrollments. Even with audience selection via the model and FERA-specific messaging, campaign enrollments are expected to remain heavily weighted to CARE based on the target population size, since we are constrained to present both programs on a single application.

Although PG&E continues to see significantly more CARE enrollments resulting from the FERA direct marketing, campaign analysis shows that the FERA acquisition campaigns have a positive impact on driving enrollment, though at a much slower rate than needed to achieve the 50% penetration rate

[13] Athens CARE and FERA eligibility estimates for 2021: FERA - 152,625 and CARE - 1,447,571.

by 2023. When comparing the enrollment rates for customers who received the FERA acquisition communications versus the No Mail Control customers who do not receive the communications, there is an increase in enrollment rates (or "lift") for those who receive marketing (the lift is discussed further in the section below).

There were no FERA Failed to Recertify (FTR) acquisition campaigns executed in 2021 since the recertification requirement remained on hold until July 2021 as part of the emergency customer protections. The first customers who fail to recertify began at the end of October 2021, so PG&E plans to resume marketing to the FTR segment in 2022 with the first outreach campaign expected to launch during Q1.

- **Targeting optimization - New FERA Model Development and Launch**
  PG&E has used three targeting approaches for FERA Acquisition outreach from 2019 to 2021.

  1) PG&E began FERA targeted outreach in 2019 using the CARE model with third party data variables (Household Size and Income) overlayed to attempt to select for FERA eligible customers. The resulting audience size was very small (only about 16K customers for targeted marketing). PG&E determined that to meet the substantial enrollment increase required to meet the directed penetration rate goal, it was necessary to refine the model and identify more potential FERA customers.

  2) PG&E worked with a vendor to develop an initial FERA propensity model in November of 2019. The model was used in Q1 2020 to select a target audience of customers likely to be eligible for FERA for use in for direct marketing. However, the onset of the COVID-19 pandemic necessitated adjustments to the targeting strategy because more customers were now presumed to be eligible. Use of the propensity model was put on hold while targeting parameters were broadened to reach more non-enrolled customers across PG&E's territory.

  3) In March 2021, PG&E began to rebuild both the CARE and FERA propensity models to identify PG&E customers with higher likelihood to be eligible and enroll in each program. Several factors drove the decision to begin rebuilding the models, including economic changes from the COVID-19 pandemic and subsequent enrollment increases, indicators of model degradation and the desire to include additional predictive variables. PG&E leveraged the customer database, website activity on pge.com, and other external sources (such as unemployment data) to create a modeling universe with data from 2020 and 2021.

  After creating the model universe, the initial set of approximately 300 variables was reduced to 30 variables that were included in the model building

process. Several different model candidates were created, with each model version using the same set of customer data but different modeling techniques. The performance of each model candidate was compared to the current model, looking at the predictive accuracy and a 'Champion' model was selected for FERA. Variables such as tenure, payment types, eligibility rates from Athens, and ethnicity were among those with the highest predictive power for enrollments.

Compared to the previous model, the new model showed a significant improvement for FERA enrollments occurring in the top deciles. The overall enrollment rate seen in Decile one was twice as high for the new model versus the previous version.

As discussed in the section above, FERA marketing campaigns successfully drive incremental enrollments. The acquisition models are an important tool for more effective targeting and efficiency of the campaigns, especially when seeking to find the small number of FERA eligible customers within the much larger CARE-eligible population.

When PG&E compares increased FERA enrollment rates for campaigns executed using the 2019-developed FERA propensity model in Q1 and Q2 to the version developed in 2021 and tested in Q3, there is a significant increase in the lift with the new model. The Q1 and Q2 campaign enrollment rate lift for marketing recipients versus non-recipients was about 200%. When the new model was applied for the Q3 campaign, the lift of a FERA recipient versus non-recipient for FERA enrollments was about 333%.

PG&E plans to complete analysis to compare the FERA direct marketing campaign enrollment rates across 2019, 2020 and 2021 and submit a Tier 2 Advice Letter that complies with D.21-06-015.[14] As indicated above, the early results for the Q3 2021 campaign highlight that the 2021 model produces higher enrollment rates than either the CARE model appended with additional date or the 2019 iteration of the PG&E FERA propensity model.

- **Digital Advertising**
  In 2021, PG&E deployed a digital media campaign for FERA with multiple layers of paid digital media efforts including search, Gmail ads, video, display and native (contextual) advertising that is always-on throughout the year. Creative is developed in both Spanish and English.

  The FERA digital campaign spend was increased as a total portion of the overall CARE FERA media spend, from approximately 20% of total media plan to 35%. The base media buy was territory-wide but PG&E continued to include a layer of increased spending in select zip codes as part of the

[14] D.21-06-015, p. 103.

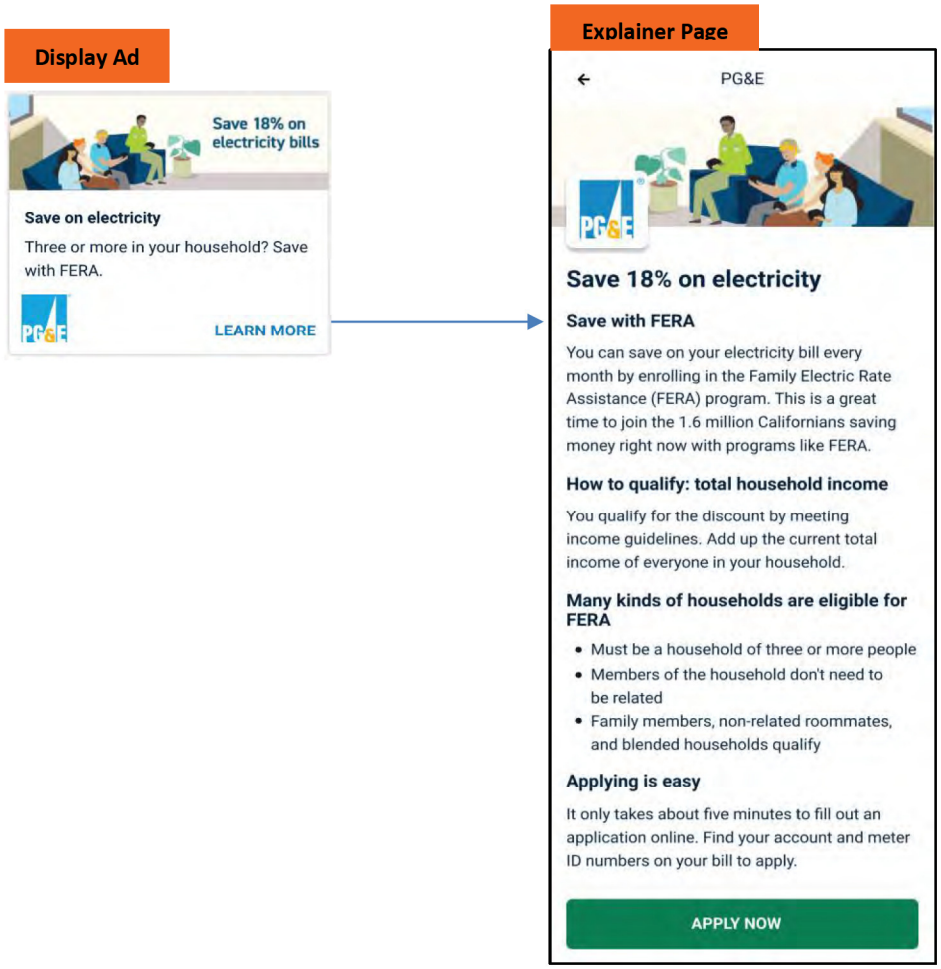
strategy to increase awareness with Hard-to-Reach customers. Zip codes were identified as Hard-to-Reach based on lower CARE and FERA penetration rates, and those that were in designated rural and/or high poverty areas.[15]

Based on strong performance in 2020, PG&E continued advertisements on the Fresh EBT mobile application (in English and Spanish language) which allows customers to instantly check their EBT balance, clip online coupons, and explore job posts and other money-making activities making it the ideal environment to promote CARE and FERA.

In Q3, the Fresh EBT ad creative was updated, and PG&E tested a new ad format, called an Explainer page (Figure 2 below). A sub-link on the FERA display ad opens an in-app page which provides additional information about the FERA program eligibility and benefit to the customer. Fresh EBT display and the new Explainer page showed strong performance with a click-through rate (CTR) of 1.13% for the display ad. Although the impressions delivered for the new Explainer page was relatively small (515 views), the Explainer page CTR was over 59%.

[15] A High Poverty household has income at or below 100% of the Federal Poverty Level Guidelines. Rural areas are generally defined as those isolated from larger metropolitan areas, by distance or other physical features. PG&E has identified specific zip codes and counties within PG&E's territory that fall within these definitions for targeting purposes. The 2021 Hard-to-Reach zip code targeting list included 227 (out of 1,001) prioritized zip codes which capture most of the CARE eligible, non-enrolled, FERA eligible, non-enrolled, Rural and High Poverty customers.

Figure 2 – Fresh EBT Display Ad and Explainer Page example



PG&E also continued Google Discovery Ads, a tactic to help reach newly eligible FERA customers because it uses past behavior to serve up relevant content and ads. For example, if customers are searching for things like "unemployment claims", "government checks", "can't pay my bills", they could be served with a CARE/FERA ad.

Through the first nine months of 2021, the digital campaign is pacing to achieve established annual goals and surpass 2020's click-through rate. The digital campaign delivered over 99 million impressions through September, and although overall CARE/FERA landing page visits were down versus 2020, the cost per landing page visit was on par with 2020 results.

- **Multicultural Media Campaign**
  In 2021, insights from the updates to the 2020 PG&E CARE and FERA customer profiles led to refinements in the multicultural campaign strategy.

PG&E expanded multicultural marketing efforts to drive awareness with additional multilingual tactics, prioritizing prevalent Asian languages in PG&E's territory.

PG&E continued to promote rate assistance programs to income qualified customers via display ads, paid search and Google discovery ads in Spanish, Korean, Chinese, Vietnamese and Russian. The display ads ran throughout 2021, with search and Google ads running January through September.

Print advertising was added to the campaign in 2021, placed in publications with an estimated circulation of over 1.5 million. The print ads targeted audiences in Chinese, Korean, Vietnamese and Russian. PG&E also included TV interviews on stations with programming in Chinese, Korean, Tagalog, and Vietnamese. Finally, digital video ads in Chinese, Korean and Vietnamese were added to the campaign and ran over a period of approximately 12 weeks.

The full year results will be reviewed in early 2022, but through September the digital portion of the multicultural campaign generated almost 120 million impressions, with over 82,000 clicks and 103,000 landing page visits.

- **Hard-to-Reach Customer Media Campaign**
  A coordinated awareness media campaign focused on hard-to-reach audiences continued through 2021. The campaign included digital radio and video, TV interviews and home-delivered print. As described above for the digital ad campaign, zip code targeting was used to identify key areas of opportunity for increased program enrollment looking at areas of sizeable numbers of estimated unenrolled CARE and FERA customers, high poverty and rural zips.

  The zip-targeted digital media tactics delivered a total of approximately 52 million paid impressions and more than 350,000 clicks through September. Print tactics were distributed to a total of 2.9 million households. Digital radio enabled targeting in the Hard-to-Reach zip codes.

- **CARE/FERA Landing Page**
  Throughout 2021, PG&E leveraged www.pge.com/carefera to engage with customers; highlighting information about respective program tips and tools to support their energy management journey. This page presents program requirements, key program differences and prominently links to the dual application form for CARE and FERA. Online enrollments accounted for 72% of the total 2021 FERA new enrollments through November.

The CARE/FERA landing page also highlights important alerts and updates to Customer Protections information and links customers to pages where they can find additional information about other programs, financial assistance and support.

- **Bill Inserts**
  Enrollments attributed to bill inserts shows some decline as the number of customers who receive electronic bills increases. PG&E continues to use combined program messaging for bill inserts where targeting capabilities are limited.

  The CARE/FERA application was inserted in the bill package five times throughout the year to all non-CARE/FERA enrolled residential customers who receive a paper bill. The June insert including the updated income guidelines for CARE and FERA was sent to approximately 2.2 million non-CARE/FERA customers. Bill inserts delivered 315 FERA enrollments through November.

- **PG&E Earned Media and Owned Assets**
  PG&E continued to deploy an income qualified targeted email newsletter to approximately 1.6 million residential customers. CARE and FERA were featured in the June issue and the November issue specifically promoted FERA.

  PG&E promoted CARE and FERA in the Home Energy Reports throughout the year. CARE and FERA were promoted in July and FERA in October for the electronic version of the Home Energy Reports (eHERs). The print version promoted FERA in March-April and CARE and FERA July-August. Customers receiving the quarterly Home Energy Report saw a CARE/FERA promotion during April-May.

  PG&E participates in media interviews throughout the territory and distributes press releases throughout the year to promote CARE and FERA. Between February and November several release topics reminded customers of the ongoing support available to help with the COVID-19 Pandemic impact and support through the transition as some Customer Protections ended in 2021. Interviews and articles highlight CARE and FERA programs as part of the COVID-19 customer support, including how CARE and FERA participants may be eligible for past due bill payment plans, and a way to help customers lower future bills.

III. Outreach

- **Outbound Financial Assistance**
  In May 2020, PG&E stood up a new outbound calling campaign in order to reach customers with past due amounts. The outbound calls provided customers with flexible pay plans as well as information about CARE, FERA, Medical Baseline, and other agency assistance programs. Customers who were deemed to be eligible for a specific program were enrolled. Final annual data for 2021 will be reported in the FERA Annual Report, to be filed in May 2022.

  The campaign information is only through November 2021 and it consisted of customers, Customer Service Representatives (CSRs) were able to make contact with directly. The customers who could not be reached received a voicemail with information regarding financial assistance programs.

  The campaign was also successful in identifying over $12M in potential savings from better rate options. Customers with a past due balance were directed to Low Income Home Energy Assistance Program (LIHEAP) where they received pledges totaling $238,572 or enrolled in Arrearage Management Plan (AMP) where eligible.

  Table 4: Outbound Campaigns for Financial Challenged Customers from January, 2021 - November 30, 2021

	Totals
Number of Customers Reviewed	249,479
Number of Customers Called	60,666
Enrolled in CARE	4,058
Enrolled in FERA	119
LIHEAP Pledge Amounts	$238,572
Savings from Completed Rate Changes	$12,069,442

- **Community-Based Organization (CBO)**
  PG&E utilizes its broad network of Community-based organization (CBO) partners to conduct outreach for FERA and other assistance programs available to customers. These organizations play an important role in helping PG&E communicate about the availability of various assistance programs like FERA to our customers. While PG&E's current CBO network has broad geographic coverage, PG&E continues to focus on increasing its partnerships with CBOs based in the Central Valley region. While the pandemic continues to impact some CBO operations, most have resumed in-person activities. PG&E created a toolkit, including a fact sheet, social media guides, and newsletter content for the CBOs to use in their outreach efforts.

CBOs utilized social media, newsletters, direct mail, one-on-one meetings in offices, in-person events, and food box distributions to distribute information about FERA and other available program to customers.

In Q3, PG&E added a capitation fee for FERA enrollments to its Community Outreach Contractor (COC) program and for ESA contractors.

Furthermore, in Q2, Q3 and Q4, PG& entered into new paid agreements with CBOs. These paid agreements were made with sixteen CBOs (including 4 additional affiliate office locations, and 9 CBOs based in the Central Valley region) for marketing, education, and outreach work related to the phase out of COVID-19 emergency protections. In Q4, PG&E extended its agreements in a "Phase 2" of the project with fourteen CBOs (including 5 CBOs based in the Central Valley) to ensure our partners continue to amplify these important messages throughout Q1 2022. Each of these CBOs attended multiple onboarding trainings and workshops, hosted remotely due to COVID-19 restrictions.

PG&E continued to engage with existing CBOs as well as new ones and encourage them to participate in a Request for Proposal (RFP)[16] opportunity to continue providing marketing, education, and outreach on FERA and other programs. The ME&O efforts will be targeting "hard-to-reach" populations across the utility's service territory, including rural, tribal, indigenous, language-isolated, geographically-isolated, disadvantaged communities (DACs), environmental and social justice communities, and populations which face barriers to access. Via this RFP process, PG&E aims to increase its CBO partnerships with health-based organizations, organizations serving tribal members, as well as continue to focus on broad geographic coverage and ensuring diverse CBOs are active partners throughout the Central Valley region.

IV. FERA Retention Campaigns

Retention campaigns were paused as Emergency Customer Protections were put in place to support customers during the COVID-19 pandemic.[17] PG&E started retention campaigns in July 2021, when certain customer protections were discontinued and recertifications resumed.

PG&E's FERA retention outreach focuses on reducing attrition through failure to recertify for the program. FERA-enrolled customers are required to recertify their eligibility every two years (every four years for those on a fixed income). PG&E

[16] *RFP 127674, "Community-Based Organization (CBO) Marketing, Education, and Outreach (ME&O) Services for Income-Qualified, Electric Vehicle, Workforce Education & Training, and/or Microgrid Initiatives,"* is expected to be executed in Q1 2022.

[17] Resolution M-4842, Emergency Authorization and Order Directing Utilities to Implement Emergency COVID-19 Protections.

restarted the monthly auto-recertification campaign in Q3 2021, automatically recertifying customers in Deciles 1 and 2.[18] PG&E sent these customers email notification to alert them that they were automatically re-enrolled in the FERA Program and no further action was required to continue to receive the FERA discount. The email indicated that the customer could opt-out of the program if they are no longer qualified.

As part of the campaign, PG&E deployed the FERA recertification reminders to customers in deciles 3-10. The campaign mirrors the approach that has been in place for CARE since 2015. Customers with a valid email received email reminders at 120-days, 90-days, 60-days and 30-days prior to the recertification date with a call-to-action to re-enroll before their program end date. Additionally, a direct mail letter and application were sent at the 90-day mark to all customers due to recertify.

Conclusion

In conclusion, this letter contains the 2021 FERA results as is required by D.18-08-013, issued on August 17, 2018

Protests

This is an information-only AL submittal. Pursuant to General Order 96-B Section 6.2, PG&E is not seeking relief through this AL and is not subject to protest. Instead, PG&E is reporting progress to increase FERA program enrollment.

Effective Date

PG&E requests that this information-only advice letter become effective upon date of submittal, which is **December 15, 2021**.

Notice

In accordance with General Order 96-B, Section IV, a copy of this AL is being sent electronically and via U.S. mail to parties shown on the attached list and the parties on the service lists for **A.16-06-013, A.14-11-007 et al.,** and **A.19-11-003 et al**. Address changes to the General Order 96-B service list should be directed to PG&E at email address PGETariffs@pge.com. For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. AL submittals can also be accessed electronically at: http://www.pge.com/tariffs/.

[18] The FERA propensity model assigns customers a Decile score from 1 to 10, with 1 being the most-likely to be FERA-eligible and 10 being the least likely to be FERA-eligible. CARE and FERA auto-recertification is executed for Deciles 1-2.

/S/
Sidney Bob Dietz II
Director, Regulatory Relations

cc: Service Lists in A.16-06-013, A.14-11-007 et al., and A.19-11-003 et al.

California Public Utilities Commission

ADVICE LETTER SUMMARY

ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.: Pacific Gas and Electric Company (U 39 E)

Utility type:
☑ ELC ☐ GAS ☐ WATER
☐ PLC ☐ HEAT

Contact Person: Stuart Rubio
Phone #: (415) 973-4587
E-mail: PGETariffs@pge.com
E-mail Disposition Notice to: SHR8@pge.com

EXPLANATION OF UTILITY TYPE
ELC = Electric GAS = Gas WATER = Water
PLC = Pipeline HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 6434-E

Tier Designation:

Subject of AL: Information-only Advice Letter on Pacific Gas and Electric Company's Progress to Increase Family Electric Rate Assistance Program Enrollment per Decision (D.) 18-08-013

Keywords (choose from CPUC listing): Compliance

AL Type: ☐ Monthly ☐ Quarterly ☐ Annual ☑ One-Time ☐ Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #: D.18-08-013

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL: N/A

Confidential treatment requested? ☐ Yes ☑ No

If yes, specification of confidential information:
Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:

Resolution required? ☐ Yes ☑ No

Requested effective date: 12/15/21 No. of tariff sheets: 0

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: N/A

Service affected and changes proposed[1]: N/A

Pending advice letters that revise the same tariff sheets: N/A

[1]Discuss in AL if more space is needed.

Clear Form

Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102
Email: EDTariffUnit@cpuc.ca.gov

Name: Sidney Bob Dietz II, c/o Megan Lawson
Title: Director, Regulatory Relations
Utility Name: Pacific Gas and Electric Company
Address: 77 Beale Street, Mail Code B13U
City: San Francisco, CA 94177
State: California Zip: 94177
Telephone (xxx) xxx-xxxx: (415)973-2093
Facsimile (xxx) xxx-xxxx: (415)973-3582
Email: PGETariffs@pge.com

Name:
Title:
Utility Name:
Address:
City:
State: District of Columbia Zip:
Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email:

Clear Form

PG&E Gas and Electric
Advice Submittal List
General Order 96-B, Section IV

AT&T
Albion Power Company

Alta Power Group, LLC
Anderson & Poole

Atlas ReFuel
BART

Barkovich & Yap, Inc.
California Cotton Ginners & Growers Assn
California Energy Commission

California Hub for Energy Efficiency Financing

California Alternative Energy and Advanced Transportation Financing Authority
California Public Utilities Commission
Calpine

Cameron-Daniel, P.C.
Casner, Steve
Cenergy Power
Center for Biological Diversity

Chevron Pipeline and Power
City of Palo Alto

City of San Jose
Clean Power Research
Coast Economic Consulting
Commercial Energy
Crossborder Energy
Crown Road Energy, LLC
Davis Wright Tremaine LLP
Day Carter Murphy

Dept of General Services
Don Pickett & Associates, Inc.
Douglass & Liddell

East Bay Community Energy Ellison Schneider & Harris LLP Energy Management Service
Engineers and Scientists of California

GenOn Energy, Inc.
Goodin, MacBride, Squeri, Schlotz & Ritchie
Green Power Institute
Hanna & Morton
ICF
International Power Technology

Intertie

Intestate Gas Services, Inc.
Kelly Group
Ken Bohn Consulting
Keyes & Fox LLP
Leviton Manufacturing Co., Inc.

Los Angeles County Integrated Waste Management Task Force
MRW & Associates
Manatt Phelps Phillips
Marin Energy Authority
McKenzie & Associates

Modesto Irrigation District
NLine Energy, Inc.
NRG Solar

OnGrid Solar
Pacific Gas and Electric Company
Peninsula Clean Energy

Pioneer Community Energy

Public Advocates Office

Redwood Coast Energy Authority
Regulatory & Cogeneration Service, Inc.
SCD Energy Solutions
San Diego Gas & Electric Company

SPURR
San Francisco Water Power and Sewer
Sempra Utilities

Sierra Telephone Company, Inc.
Southern California Edison Company
Southern California Gas Company
Spark Energy
Sun Light & Power
Sunshine Design
Tecogen, Inc.
TerraVerde Renewable Partners
Tiger Natural Gas, Inc.

TransCanada
Utility Cost Management
Utility Power Solutions
Water and Energy Consulting Wellhead Electric Company
Western Manufactured Housing Communities Association (WMA)
Yep Energy

ATTACHMENT 11:

Excerpt of PG&E's response to Cal Advocates' Data Request, DR-CARE-PGE-03

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_030-Q04		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_030-Q04		
Request Date:	March 1, 2022	Requester DR No.:	CAL ADVOCATES-CARE-PGE-03
Date Sent:	March 22, 2022	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

The following questions make a distinction between CARE recertification, high usage post-enrollment verification (HU-PEV), and post-enrollment income verification (PEV). Where the questions refer to "recertification," this data request is referring to when CARE customers must communicate with their utility that they still qualify for the discount program, excluding PEV and HU-PEV processes.

For the purpose of this data request, "non-responders" is defined as a customer who was removed from CARE due to failure to respond to recertification, PEV, or HU-PEV, within the 12 months prior to the disconnection.

QUESTION 04

Please use the template "CARE DR 3 Template.xlsx" to answer this question.

a. How many CARE households were subject to the following types of income verification between the reinstatement of income verification processes in mid-2021 and January 1, 2022?
    a. Recertification (excluding recertified customers and "duplicates")
    b. b. PEV
    c. c. HU-PEV
b. Of the households referenced in question 4(a), how many were removed from CARE due to non-response? Please report results separately for each type of income verification.
c. How many of the "non-responders" in question 4(b) have entered arrears since being removed from CARE? Please report results separately for each type of income verification.
d. How many of the "non-responders" in question 4(b) have been disconnected from service? Please report results separately for each type of income verification.

ANSWER 04

Please see the Question 4 tab in attachment *LowIncomeProgramPY21-26_DR_CalAdvocates_030-Q01Atch01.xlsx*. PG&E completed the table for Question 4 as formatted using the template received for this data request.

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_030-Q05		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_030-Q05		
Request Date:	March 1, 2022	Requester DR No.:	CAL ADVOCATES-CARE-PGE-03
Date Sent:	March 22, 2022	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

The following questions make a distinction between CARE recertification, high usage post-enrollment verification (HU-PEV), and post-enrollment income verification (PEV). Where the questions refer to "recertification," this data request is referring to when CARE customers must communicate with their utility that they still qualify for the discount program, excluding PEV and HU-PEV processes.

For the purpose of this data request, "non-responders" is defined as a customer who was removed from CARE due to failure to respond to recertification, PEV, or HU-PEV, within the 12 months prior to the disconnection.

QUESTION 05

a. Since July 1, 2021, what percentage of CARE customers have entered arrears? What percentage have been disconnected?
b. Since July 1, 2021, what percentage of non-CARE customers have entered arrears? What percentage have been disconnected? **Please exclude customers who were removed from CARE due to non-response since July 1, 2021 in these values.**

ANSWER 05

a. From July 1, 2021, through January 31, 2022, 56% of CARE customers have entered arrears and 0% of CARE customers have been disconnected.
b. From July 1, 2021, through January 31, 2022, 38% of non-CARE customers have entered arrears and 0% of non-CARE customers have been disconnected. These values exclude customers who were removed from CARE due to non-response since July 1, 2021.

PACIFIC GAS AND ELECTRIC COMPANY
Low Income Program – Program Year 2021-2026
Application 19-11-003
Data Response

PG&E Data Request No.:	CalAdvocates_030-Q11		
PG&E File Name:	LowIncomeProgramPY21-26_DR_CalAdvocates_030-Q11		
Request Date:	March 1, 2022	Requester DR No.:	CAL ADVOCATES-CARE-PGE-03
Date Sent:	March 15, 2022	Requesting Party:	Public Advocates Office
PG&E Witness:	Neil Singh	Requester:	Adam Buchholz

The following questions make a distinction between CARE recertification, high usage post-enrollment verification (HU-PEV), and post-enrollment income verification (PEV). Where the questions refer to "recertification," this data request is referring to when CARE customers must communicate with their utility that they still qualify for the discount program, excluding PEV and HU-PEV processes.

For the purpose of this data request, "non-responders" is defined as a customer who was removed from CARE due to failure to respond to recertification, PEV, or HU-PEV, within the 12 months prior to the disconnection.

QUESTION 11

If a customer is removed from CARE or FERA due to non-response to income verification, but later re-enrolls in the discount program, is there any circumstance under which PG&E returns missed CARE or FERA discounts to the customer?

ANSWER 11

Yes, there can be a circumstance where PG&E returns missed CARE of FERA discounts to the customer. PG&E's current policy is to return missed CARE or FERA discounts for up to three billing periods, if requested by the customer. Customer requests for missed discounts greater than three months are considered on a case-by-case basis.

ATTACHMENT 12:

Excerpt of SCE's response to Cal Advocates' Data Request, DR-CARE-SCE-03

Southern California Edison

A.19-11-003 et al (A.19-11-004, A.19-04-005, A.19-04-006, and A.19-04-007) – PG&E Application for Approval of Energy Savings Assistance and California Alternate Rates for Energy Programs and Budgets for 2021-2026 Program Years.[CONSOLIDATION ALERT: A.19-11-003, A.19-11-004, A.19-11-005, A.19-11-006, A.19-11-007 are CONSOLIDATED]

DATA REQUEST SET Cal Advocates-CARE-SCE-03

To: Cal Advocates
Prepared by: Anthony Abeyta
Job Title: CARE/FERA Program Advisor
Received Date: 3/1/2022

Response Date: 3/22/2022

Question 04:
Please use the template "CARE DR 3 Template.xlsx" to answer this question.

a. How many CARE households were subject to the following types of income verification between the reinstatement of income verification processes in mid-2021 and January 1, 2022?
    1. Recertification (excluding recertified customers and "duplicates")
    2. PEV
    3. HU-PEV
b. Of the households referenced in question 4(a), how many were removed from CARE due to non-response? Please report results separately for each type of income verification.
c. How many of the "non-responders" in question 4(b) have entered arrears since being removed from CARE? Please report results separately for each type of income verification.
d. How many of the "non-responders" in question 4(b) have been disconnected from service? Please report results separately for each type of income verification.

Response to Question 04:
Please see the attached excel spreadsheet entitled, "Cal Advocates DR-CARE-SCE-03 Qs 1-4.xlsx" which provides the requested data for this question.

Q4: Please complete the below table for customers who were subjected to each type of eligibility verification listed below between the reinstatement of CARE income verification in mid-2021 and January 1, 2022.

EVENT	a. Total Subject to verification	b. Total removed from CARE due to non-response	c. Arrears (please include all non-responders, even if their arrearage happened after January 1, 2022)	d. Disconnected (please include all non-responders, even if their arrearage happened after January 1, 2022)
i. **Recertification** *excluding automatically-recertified customers and duplicates*	129,311	302	81	0
ii. PEV	0	0	0	0
iii. HU-PEV	7,704	255	130	0

Southern California Edison

A.19-11-003 et al (A.19-11-004, A.19-04-005, A.19-04-006, and A.19-04-007) – PG&E Application for Approval of Energy Savings Assistance and California Alternate Rates for Energy Programs and Budgets for 2021-2026 Program Years.[CONSOLIDATION ALERT: A.19-11-003, A.19-11-004, A.19-11-005, A.19-11-006, A.19-11-007 are CONSOLIDATED]

DATA REQUEST SET C a l A d v o c a t e s - C A R E - S C E - 0 3

To: Cal Advocates
Prepared by: Anthony Abeyta
Job Title: CARE/FERA Program Advisor
Received Date: 3/1/2022

Response Date: 3/22/2022

Question 05:

a. Since July 1, 2021, what percentage of CARE customers have entered arrears? What percentage have been disconnected?

b. Since July 1, 2021, what percentage of non-CARE customers have entered arrears? What percentage have been disconnected? Please exclude customers who were removed from CARE due to non-response since July 1, 2021 in these values.

Response to Question 05:

Since July 1, 2021, 47.4% of CARE customers have entered arrears with no disconnections.

Since July 1, 2021, 33.6% of non-CARE customers have entered arrears with no disconnections.

SCE excluded customers who were removed from CARE due to non-response since July 1, 2021 as requested.

Southern California Edison

A.19-11-003 et al (A.19-11-004, A.19-04-005, A.19-04-006, and A.19-04-007) – PG&E Application for Approval of Energy Savings Assistance and California Alternate Rates for Energy Programs and Budgets for 2021-2026 Program Years.[CONSOLIDATION ALERT: A.19-11-003, A.19-11-004, A.19-11-005, A.19-11-006, A.19-11-007 are CONSOLIDATED]

DATA REQUEST SET Cal Advocates-CARE-SCE-03

To: Cal Advocates
Prepared by: Anthony Abeyta
Job Title: CARE/FERA Program Advisor
Received Date: 3/1/2022

Response Date: 3/15/2022

Question 11:
If a customer is removed from CARE or FERA due to non-response to income verification, but later re-enrolls in the discount program, is there any circumstance under which SCE returns missed CARE or FERA discounts to the customer?

Response to Question 11:
For CARE and FERA, SCE will retroactively apply the discount if a customer who is removed due to non-response to income verification but later re-enrolls in the discount program in cases where a delay or error was made by SCE (e.g., Customer not notified of verification request due to incorrect address/email on file).

ATTACHMENT 13:

Excerpt of SoCalGas's response to Cal Advocates' Data Request, DR-CARE-SCG-03

SOUTHERN CALIFORNIA GAS COMPANY

DATA REQUEST FROM CAL ADVOCATES

(DATA REQUEST CAL ADVOCATES-CARE-SCG-03)

RECEIVED: MARCH 1, 2022
SUBMITTED: MARCH 15, 2022

QUESTION 4:
Please use the template "CARE DR 3 Template.xlsx" to answer this question.

a. How many CARE households were subject to the following types of income verification between the reinstatement of income verification processes in mid-2021 and January 1, 2022?
    a. Recertification (*excluding auto*-recertified customers and "duplicates")
    b. PEV
    c. HU-PEV

b. Of the households referenced in question 4(a), how many were removed from CARE due to non-response? Please report results separately for each type of income verification.

c. How many of the "non-responders" in question 4(b) have entered arrears since being removed from CARE? Please report results separately for each type of income verification.

d. How many of the "non-responders" in question 4(b) have been disconnected from service? Please report results separately for each type of income verification.

SoCalGas RESPONSE:
Please see the attached file CalAdvocates-CARE-SCG-03_SoCalGas Data Request Response (03-15-22).xlsx, see workbook tab "Question 4".

All newly enrolled and recertified CARE customers are subject to PEV; however, only those selected for PEV are counted in response to Question 4, column a. Total Subject to verification.

SoCalGas added a note to Question 4 in the CARE DR 3 Template to clarify. On July 1, 2021, all CARE customers who had incomplete PEVs prior to March 2020 were resent the notice and given another 100 days to complete their incomplete PEV/Recertification. These customers were previously subject to, and sent a "verification" request prior to March 2020, but had not completed the request by June 30, 2021. These CARE customers were given another opportunity to complete the PEV or Recertification beginning July 1, 2021 once the COVID-19 Emergency Disaster Relief customer protections were lifted. SoCalGas indicated these total counts separately and cumulatively in the tab Question 4 in the template.

For disconnections (part d), with the passage of California Assembly Bill (AB) 135, customers with COVID-19 related debt and are eligible for relief under the California Arrearage Payment Program (CAPP) are protected from the risk of disconnection until June 2022. See Cal. Government Code Section 16429.5. This is also outlined in Decision 21-06-036. SoCalGas has extended the disconnections protection for CAPP-eligible customers to all residential

customers, as it is not possible to distinguish these customers within its Customer Information System. Therefore, residential disconnections are slated to resume no earlier than August 2022.

QUESTION 5:

a. Since July 1, 2021, what percentage of CARE customers have entered arrears? What percentage have been disconnected?
b. Since July 1, 2021, what percentage of non-CARE customers have entered arrears? What percentage have been disconnected? **Please exclude customers who were removed from CARE due to non-response since July 1, 2021 in these values.**

SoCalGas RESPONSE:

a. Since July 1, 2021, 23% of CARE customers have entered arrears with 0% disconnected.
b. Since July 1, 2021, 13% of Non-CARE customers have entered arrears with 0% disconnected.

QUESTION 6:

PEV algorithms typically assign scores to customers into based on their likelihood to be unqualified for CARE. Do you retain the calculated scores for each CARE customer in past program years?

SoCalGas RESPONSE:

SoCalGas retains the most recent PEV algorithm score to determine the customer's likelihood to be CARE-eligible. However, SoCalGas does not retain the calculated scores for each CARE customer in past program years.

QUESTION 7:

a. On average, how many people live in CARE households?
b. On average, how many people live in non-CARE households?

SoCalGas RESPONSE:

a. SoCalGas also leverages third party data from Claritas for household size. After removing missing values, from the 2021 Claritas data, an average of 2.1 people live in CARE households.

   As of February 2022, based on available CARE application data, the average household size self-reported by active CARE customers is 3.4 individuals. Since household size is not required of customers who are enrolled by categorical eligibility or authorized data exchange, only 61% of CARE accounts have household size information available.

b. Claritas data from 2021 shows the average household size in non-CARE households is 2.14.

   SoCalGas does not have self-reported household size data for non-CARE households.

QUESTION 8:
What percentage of residential CARE accounts are associated with customer social security numbers (SSNs) or Individual Taxpayer Identification Numbers (ITINs)?

SoCalGas RESPONSE:
78% of residential CARE accounts are associated with customer SSNs or ITINs.

QUESTION 9:
What percentage of residential non-CARE accounts are associated with customer social security numbers (SSNs) or Individual Taxpayer Identification Numbers (ITINs)?

SoCalGas RESPONSE:
81% of residential non-CARE accounts are associated with customer SSNs or ITINs.

QUESTION 10:
Does SoCalGas collect the date of birth for customers? If so, what percentage of customers have their date of birth associated with their account?

SoCalGas RESPONSE:
SoCalGas solicits the date of birth for a customer of record and their respective spouse when establishing an account for service; however, providing this information is optional. SoCalGas has 90% of customers that have their date of birth associated with their account.

QUESTION 11:
If a customer is removed from CARE or FERA due to non-response to income verification, but later re-enrolls in the discount program, is there any circumstance under which SoCalGas returns missed CARE or FERA discounts to the customer?

SoCalGas RESPONSE:
SoCalGas does not typically return missed CARE discounts to the customer unless the utility is determined to be at fault (e.g., CARE application was received but not processed) or customer has reasonable justification.

4. Please complete the below table for customers who were subjected to each type of eligibility verification listed below between the reinstatement of CARE income verification in mid-2021 and January 1, 2022.				
	a. Total Subject to verification[1]	**b. Total removed from CARE due to non-response**	**c. Arrears (please include all non-responders, even if their arrearage happened after January 1, 2022)**	**d. Disconnected (please include all non-responders, even if their arrearage happened after January 1, 2022)**
i. Recertification excluding automatically-recertified customers and duplicates	289,065	110,716	36,367	-
ii. PEV	23,060	14,762	4,487	-
iii. H/U	N/A	N/A	N/A	N/A

Below are CARE customers subject to eligibility verification between mid-2021 and January 1, 2022				
	a. Customers subject to scheduled verification between 7/1/21-1/1/22	**b. Total removed from CARE due to non-response**	**c. Arrears (please include all non-responders, even if their arrearage happened after January 1, 2022)**	**d. Disconnected (please include all non-responders, even if their arrearage happened after January 1, 2022)**
i. Recertification excluding automatically-recertified customers and duplicates	138,364	56,946	18,509	-
ii. PEV	19,641	13,383	4,180	-
Below are CARE customers resent a PEV/RECERT due to COVID protections ending (in PEV or RECERT incomplete status prior to March 2020)				
i. Recertification excluding automatically-recertified customers and duplicates[1]	150,701	53,770	17,858	-
ii. PEV[1]	3,419	1,379	307	-

Note:

[1] On July 1, 2021, all CARE incomplete customers were resent the notice and given another 100 days to complete their already incomplete PEV/Recertification (RECERT) prior to March 2020. These customers were previously sent a verification request prior to March 2020, but had not responded or completed the request by June 30, 2021, and were thus were given another opportunity on July 1, 2021, to complete the PEV or RECERT, due to expiration of COVID customer protections.

ATTACHMENT 14:

Excerpt of SDG&E's response to Cal Advocates' Data Request, DR-CARE-SDGE-03

CAL ADVOCATES DATA REQUEST
CAL ADVOCATES-CARE-SDGE-03
Questions 1, 2, 3, and 5; update 8 & 9
DATE RECEIVED: March 1, 2022
DATE RESPONDED: March 29, 2022

4. *Please use the template "CARE DR 3 Template.xlsx" to answer this question*.

a. How many CARE households were subject to the following types of income verification between the reinstatement of income verification processes in mid-2021 and January 1, 2022?

a. Recertification (*excluding* recertified customers and "duplicates")
b. PEV
c. HU-PEV

b. Of the households referenced in question 4(a), how many were removed from CARE due to non-response? Please report results separately for each type of income verification.

c. How many of the "non-responders" in question 4(b) have entered arrears since being removed from CARE? Please report results separately for each type of income verification.

d. How many of the "non-responders" in question 4(b) have been disconnected from service? Please report results separately for each type of income verification.

SDG&E Response:

Please see response on the Question 4 tab of attached Excel spreadsheet "CARE DR 3 Template_Apr_1_Q4"

CAL ADVOCATES DATA REQUEST
CAL ADVOCATES-CARE-SDGE-03
Questions 1, 2, 3, and 5; update 8 & 9
DATE RECEIVED: March 1, 2022
DATE RESPONDED: March 29, 2022

5.
a. Since July 1, 2021, what percentage of CARE customers have entered arrears? What percentage have been disconnected?

b. Since July 1, 2021, what percentage of non-CARE customers have entered arrears? What percentage have been disconnected?

SDG&E Response:

% CARE in arrears since 7/1/21	% CARE Disconnected	% non-CARE in arrears since 7/1/21	% non-CARE Disconnected
51%	0	36%	0

CAL ADVOCATES DATA REQUEST
CAL ADVOCATES-CARE-SDGE-03
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11. If a customer is removed from CARE or FERA due to non-response to income verification, but later re-enrolls in the discount program, is there any circumstance under which SDG&E returns missed CARE or FERA discounts to the customer?

SDG&E Response:
SDG&E returns any missed CARE or FERA discount if it finds there was an error on SDG&E's behalf that caused the customer to be removed from the program.

4. Please complete the below table for customers who were subjected to each type of eligibility verification listed below between the reinstatement of CARE income verification in mid-2021 and January 1, 2022.

	a. Total Subject to verification	**b. Total removed from CARE due to non-response**	**c. Arrears (please include all non-responders, even if their arrearage happened after January 1, 2022)**	**d. Disconnected (please include all non-responders, even if their arrearage happened after January 1, 2022)**
i. **Recertification** *excluding automatically-recertified customers and duplicates*	41,573	23,036*	10,211	0
ii. PEV	6,295	4,121**	1,884	0
iii. HU-PEV	15,051	10,923***	6,462	0

*This number represents the total number of customers that were sent both recertification notices and failed to respond. As disclosed in SDG&E's March 17, 2022 letter to Executive Director Rachel Peterson, due to issues with SDG&E's customer information system transfer, some CARE customers did not receive some or all of their recertification notices or their recertifications were part of a backlog, and these customers dropped off of the CARE program as a result. Customers that improperly fell off of CARE are not included in this number as they were removed due to error and not true non-response.

**This number represents the total number of customers that were sent both PEV notices. 14 customers did not receive one or both notices, are being reinstated, and are not included in this count.

***This number represents the total number of customers that were sent both HU-PEV notices. 87 customers did not receive one or both notices, are being reinstated, and are not included in this count.